

DOCUMENT RESUME

ED 251 116

IR 050 938

TITLE Retrospective Conversion. SPEC Kit 65.
INSTITUTION Association of Research Libraries, Washington, D.C.
Office of Management Studies.
PUB DATE Jun 90
NOTE 115p.
PUB TYPE Collected Works - General (020) -- Reports -
Descriptive (141)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Academic Libraries; Higher Education; *Library
Catalogs; *Library Cooperation; *Library Networks;
*Research Libraries; *Union Catalogs
IDENTIFIERS *Retrospective Conversion (Library Catalogs)

ABSTRACT

This Systems and Procedures Exchange Center (SPEC) kit on retrospective conversion, which replaces a 1975 kit on reclassification, is based on interviews with and documents from Association of Research Libraries (ARL) members participating in retrospective conversion (recon). (Reclassification is almost always conducted as a sub-project of retrospective conversion.) The kit comprises: (1) cooperative network and utility documents on recon from the Internetwork Quality Control Council, the Research Libraries Group, Inc., Palinet, and the AMIGOS Bibliographic Council; (2) systemwide and individual library documents from Texas A&M University, University of California Systemwide Administration, University of California, National Library of Medicine, Joint University Libraries, and University of Colorado-Boulder; and (3) an excerpt from an ARL-sponsored study focusing on the development of cost models for alternatives to the card catalog. The concise summary that introduces the kit briefly discusses key decisions; planning concerns; and issues and trends, including the development of guidelines that can be applied by many libraries. (THC)

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Retrospective Conversion

Kit 65

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IR050938



June 1980 No. 6



Systems and Procedures Exchange Center

RETROSPECTIVE CONVERSION

ISSN 0160 3574

Five years ago, the reclassification of partial or complete research library collections--although highly work-intensive and costly--was being undertaken by a number of ARL members seeking to move from split collections to an integrated, single catalog. Today, reclassification almost always is conducted as a sub-project of retrospective conversion--the process of converting hardcopy catalog records to machine-readable form. This Flyer and Kit, which replaces Flyer/kit #16 on Reclassification (March 1975), is based on interviews and documents of ARL members doing retrospective conversion, rather than a formal survey.

Conversion of all or most of a library's records to a machine-readable format is seen as a crucial step toward creating a more usable, flexible catalog. Libraries undertaking retrospective conversion (recon) projects often are preparing for a specific purpose such as a COM catalog or an automated circulation system. Recon also can enable a library to more easily incorporate changing cataloging rules, to upgrade inventory control and interlibrary loan recordkeeping, and to alleviate problems associated with deteriorating paper and card files. However, the financial resources and time commitments for recon in a large research library are quite demanding. Recon projects usually require special financial support, frequently from an outside source. The massive numbers of records involved and their diversity demand large amounts of staff time, while the library must meet its normal service obligations and avoid inconveniencing or adversely affecting users. Finally, there is little documentation on how to convert cards to machine-readable form. There are no standard manuals or procedures, and catalogers rarely share documentation outside their own institutions.

KEY DECISIONS/PLANNING CONCERNS Most libraries involved in recon have found that the relative success of their projects is closely tied to a number of key decisions made early in the planning stage. The primary, initial decisions involve whether to recatalog fully, partially, or not at all; what level of conversion should be done--full or partial record; and what records should be included in the project. The projected use of the converted records is the major determiner for these types of decisions. Brief or partial level of conversion might be appropriate for a library that requires records only for a single purpose such as an automated circulation system, whereas a full-level conversion with complete recataloging of non-standard records and full MARC tagging may be necessary for a library that plans to use the records for such long-range, multiple goals as alternative catalog formats, integrated technical processing, or additional reference services. Although full-level conversion is considered technically superior because it provides a more complete, usable and adaptable data base, the library's resources, time, staff, and funding also need to be closely considered at this initial stage.

A second planning effort by most libraries involves a sampling study of the shelf list or main entry file to determine the number of matches or hits with machine-readable files. Information from such a study assists libraries in determining the level of expertise and effort required for the project. Time and staff needs and the suitability of a vendor to perform some or all of the work can be better determined after a sampling study. The study also helps the library assess how much upgrading or recataloging is needed.

The start-up period is viewed as a time when most problems occur, since libraries are establishing new procedures and workflow, training personnel, and integrating new equipment concurrently. In most cases, a staff member is named the conversion project coordinator. He or she oversees quality control, sets operational-level goals, works out procedures, makes a timetable, sets up statistical records and--most important for any conversion project--hires and monitors staff. If a vendor is used, the library usually maintains responsibility for monitoring quality and quantity and should make clear its standards and expectations.

TRENDS AND ISSUES. Although retrospective conversion projects are costly and demand intense planning and heavy use of staff, such projects enable a library to take full advantage of machine-readable data at a time when the applications of computerized catalog files are increasing and as AACR 2 implementation grows near. For the amount of effort required, many libraries are finding that retrospective conversion takes little more staff time than reclassification alone, yet accomplishes a great deal more for any collection. However, the relatively few libraries doing retrospective conversion projects currently are finding the process more involved, costly, and drawn out than anticipated.

The development of sound guidelines that can be applied by many libraries is seen as a major need. One approach is for libraries to share more fully what they have learned as they conduct retrospective conversion projects, through visits and written documents. Another approach is for regional networks and bibliographic utilities to develop general guidelines and planning assistance. Several networks are providing training and planning advice either on a one-to-one basis or in seminars, and at least one bibliographic utility is developing project guidelines. The possibility of more libraries undergoing retrospective conversion depends on the availability of funding as well as on increased attention to the rigors of planning and implementing such projects. Some libraries have obtained institutional funding for small-scale projects, while Title II-C funds remain a major source for large-scale projects. Utilities are setting special pricing policies for recon, and at least one utility is offering libraries assistance in obtaining financial support.

The Kit on Retrospective Conversion (#65, June 1980, 104 pages) contains four cooperative network and utility documents, six system-wide and individual library documents, and an excerpt from an ARL-sponsored study focusing on recon for COM catalogs. SPEC kits are available by subscription from the Systems and Procedures Exchange Center, OMS/ARL, 1527 New Hampshire Ave., N.W., Washington, D.C., 20036. Individual kits may be purchased -- prepaid only -- for \$15.00 (U.S.), with a check made payable to "ARL Office of Management Studies." (Library members of ARL receive kits for \$7.50.)

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KIT #65 JUNE 1980
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COOPERATIVE NETWORK AND UTILITY DOCUMENTS

IQCC

RETROSPECTIVE CONVERSION TASK FORCE

REPORT

3-10-80

At the last IQCC meeting in December, 1979, the Retrospective Conversion Task Force made the recommendation that the current Level I and K input standards be uniformly applied to all input into the OCLC on-line union catalog, including those records generated as part of a retrospective conversion project. The recommendation was consistent with the IQCC's primary role of promoting quality control and adherence to standards in the OCLC on-line union catalog. The Task Force was aware that this would pose problems for some libraries who do not need all the elements in Level K, who are inputting from a shelf list or main entry card which has incomplete data, or who are interested only in an abbreviated record for circulation or interlibrary loan purposes.

The Task Force was given further direction at the meeting by a request to investigate a special minimal standard to be used only for retrospective conversion projects. In order to ascertain if there were a need for such a standard and the extent to which these records might pose problems in using the OCLC data base for other subsystems, a questionnaire was prepared (Appendix A).

Four hundred and forty-six questionnaires were distributed through the IQCC representative to twenty networks with each receiving a varying number, depending on the size of the network and the number of its members who had received a retrospective conversion authorization number. The distribution instructions requested that 75% of the questionnaires be sent to libraries who were involved with or planning retrospective conversion projects. It was also requested that there be representation by different types of libraries as well as a range in size.

Three hundred and thirteen responses were received, representing a 70% response rate. Of these, 238 were academic libraries, 43 were public libraries, 26 were special libraries, and 6 were school libraries. Two hundred and seventy-three libraries, or 87.2% of the respondents, were involved in a retrospective conversion project. These libraries represented 40.6% of those having an authorized retrospective conversion number at the time the questionnaire was mailed.

One of the key questions asked was whether the library would support a special minimal standard with fewer data elements than are presently required by Level K to be input into the data base only for retrospectively converted records.

An overwhelming majority, 74.5%, responded "no." Many of the 80 who replied positively added a qualifier such as "only if upgradable," "don't feel too strong," and "but it may be needed for other institutions." Of those favoring a lower standard, 45% or almost one-half indicated that records having fewer elements than those included in Level K did pose problems in using the on-line union catalog for purposes other than retrospective conversion. They cited the reasons as increased editing time, higher level of staff review, interruptions in work flow, etc.

It was felt that many who supported a lower standard would do so because they were using a shelf list or main entry card as their only source for conversion. But 72.5% said that they were using the card, but if incomplete, the book or the card and the book.

One question asked the purpose of the retrospective conversion project, and respondents were encouraged to check as many answers as appropriate. For those who favored a lower standard, the most popular reason for retrospective conversion was interlibrary loan, with a machine-based catalog being second. For those who opposed a lower standard, the machine-based catalog was most frequently cited with interlibrary loan second. The remainder of the answers were in the same order for both groups: circulation, resource sharing, union lists, collection development, and other (acquisitions cited most frequently).

The questionnaire asked for the number of records which had already been converted as well as an estimate for the next five years. The total for all respondents was that 19,491,780 records have or will be converted, 2,658,335 of which will be input originally into the data base. Of the latter figure, 795,259 will be input by libraries favoring a lower standard. The average size of project for those who favor high standards is 118,852 with 9.6% original input or 11,360 records; the average project size for the other group is 86,339 with 14.4% original input or 12,425 records.

One question asked the respondents to identify any elements of Level K which they felt should not be required in a retrospective conversion project. All but the following five elements got at least one vote: holding information; main entry, personal, subfield a; main entry, corporate, subfields a and b; and main entry, conference, subfield a.

The following are the data elements which received more than ten votes as not being required:

L.C. Card Numbers	24
National Bibliographic Number	48
ISBN	41
Cataloging Source	11
Uniform title - subfield a uniform title	17
" " " f date	14
" " " k form subheading	15

this percentage will go down as the data base grows and that, even at present, it is sufficiently low as to not add a great burden to the libraries to upgrade a portion of those records to the K Level.

Linda Crismond, Chairperson
Carolyn Hust
Joel Kent
Liana Mockus
Mary Tipton
Lou Wetherbee

APPENDIX A

The attached questionnaire is being sent by the Retrospective Conversion Task Force of OCLC's Internetwork Quality Control Council to a selected number of OCLC member libraries. It is the primary role of the IQCC to promote quality control and adherence to standards in the OCLC on-line union catalog.

Questions have been raised as to whether some libraries can or will adhere to the current OCLC I and K level standards when converting retrospective records to machine-readable form. It is the Task Force's intent to identify from your responses the applicability of the elements of bibliographic data prescribed in the K level and to determine the advisability of a new minimal level for retrospective conversion projects. In addition, we would like to have your comments on the usability or unusability to your library of partial records which do not contain all of the elements required in the K level.

Thank you for spending the time in completing this questionnaire.

Retrospective Conversion Questionnaire

1. Type of library: public __, academic __, school __, special _____ (please indicate type), other __.
2. Do you have or are you planning a retrospective conversion project? __ yes __ no. (If no, please skip to question 10).
3. How many records do you intend to convert in 1980 _____, 1981 _____, 1982 _____, 1983 _____, 1984 _____.
4. How many records have been converted? _____.
5. What is the purpose of the project (you may check more than one):
 ____ machine-based catalog ____ collection development
 ____ circulation system ____ resource sharing
 ____ interlibrary loan ____ other, please explain _____
 ____ union lists
6. For your retrospective conversion project, what is/will be the percentage of original records input into the on-line union catalog ____%.
7. What source of information do you use or plan to use for those retrospectively converted records which are or will be originally input into the on-line union catalog?
 ____ main entry card ____ shelflist, but, if incomplete
 ____ main entry card, but, from the book
 if incomplete, from the book ____ shelflist card and the book
 ____ main entry card and the book ____ other, please explain _____
 ____ shelflist card

PLEASE REFER TO THE OCLC LEVEL K STANDARDS LISTED IN THE ADDENDA TO ANSWER THE FOLLOWING QUESTIONS.

8. From your experience in retrospective conversion, are there any elements of Level K that you feel should not be required?
 ____ yes ____ no.
9. If yes, which of the element numbers would be considered for exclusion and for what reason:

<u>Number (s)</u>	<u>Reason</u>
_____	Information not normally on main entry card
_____	Information not normally on shelflist card
_____	Information not needed in machine file
_____	Limitation of staff line
_____	Other, please explain _____
_____	_____
_____	_____

10. From your experience in using the on-line union catalog for purposes other than retrospective conversion, do records having fewer elements than those included in Level K pose problems with

Retrospective Conversion Questionnaire (con't)

the efficient use of the data base? ☐ yes ☐ no.

11. If yes, please indicate which of the element numbers have caused problems when they are omitted and for what reason:

<u>Number (s)</u>	<u>Reason</u>
_____	Increases editing time
_____	Requires higher level of staff review
_____	Interrupts work flow
_____	Other, please explain _____
_____	_____
_____	_____

12. Would you support a special minimal standard with fewer data elements than are presently required by Level K to be input into the data base only for retrospectively converted records?
☐ yes ☐ no.

13. Do you have any general comments on the issues raised in this questionnaire?

ADDENDA

The current OCLC Level K input standard requires the following elements of bibliographic data:

1. L.C. Card Numbers
2. National Bibliographic Number
3. ISBN
4. Cataloging Source
5. Holding Information (system required)
6. Main entry - personal - subfield a name
7. " " " " b numeration
8. " " " " c title and other words assoc. with title
9. " " " " d date
10. Main entry - corporate - subfield a name
11. " " " " b subordinate units
12. " " " " k form subheading
13. Main entry - conference or meeting - subfield a name
14. " " " " " q second name
15. " " " " " b number
16. " " " " " c place
17. " " " " " d date
18. Main entry - uniform title - subfield a uniform title
19. " " " " " t title
20. " " " " " p part
21. " " " " " f date
22. " " " " " l language
23. " " " " " k form subheading
24. " " " " " s version
25. " " " " " h media qualifier
26. Uniform title - subfield a uniform title
27. " " " " f date
28. " " " " k form subheading
29. " " " " l language
30. " " " " p part
31. " " " " s version
32. " " " " m medium
33. " " " " n series, opus, or thematic catalog number
34. " " " " o arranged statement
35. " " " " r key
36. " " " " h media qualifier
37. Title statement - subfield a short title
38. " " " " b remainder of title
39. " " " " c remainder of title page transcription
40. Edition statement - subfield a edition
41. " " " " b additional edition information
42. Imprint - subfield a place
43. " " " b publisher
44. " " " c date
45. " " " e place of printing
46. " " " f printer
47. Collation - subfield a pagination or volumes or accompanying material

SUMMARY OF COMMENTS FROM IQCC RETROSPECTIVE CONVERSION
TASK FORCE QUESTIONNAIRE
(168 Respondents)

A. No lowering of standards: 107

Shared cataloging demands at least K Level: 26
Should be restricted to Level I: 12
Want individual archive tapes at high level: 11
Takes more editing time: 11
Higher not lower: 6
Allows more duplicate records: 6
Standards aren't being followed now: 4
Quality rather than quantity: 2

"The time it takes to bring the record up to Level K standards negates the value of using a shared cataloging system for all subsequent users."

"Completion of the fixed fields should be a minimum requirement of all input levels."

"This also has generated much of the criticism of the OCLC data base."

"The priority in quality control at this point should be to strongly encourage adherence to Level I"

"The trade-off of having the item in the data base as a sublevel record is not worth the costs to the users."

"We input complete I Level records when the records needed for conversion are not found on-line, and we expect other libraries to do the same."

"In our rush to convert and to cope with immediate costs and goals, I don't think we can afford to sacrifice our future resources at a potentially greater cost."

"To repeat the Wright State experience on a national level at this stage of the data bases' maturity would be inexcusable."

"I think it would be very shortsighted to create a dirty file full of incomplete records. We will be using this file for a long time."

"I think lowering the standard . . . would increase the number of duplicate records, already a serious problem to us."

"Anything less than Level I . . . should not even be considered. In doing so, we only postpone building a good data base."

"The OCLC system, as useful as it is, contains enough incomplete records. Let us not institutionalize this lamentable situation."

"Libraries that cannot meet the minimum standards for input of new records should arrange for assistance from their network office or other sources to upgrade substandard records before they are entered into the data base."

"We have worked so hard to upgrade records and maintain high standards. Why should we lower what has been set?"

"Why is a less complete standard even being considered?"

"Our library acquired many older titles in the process of collection development. Finding incomplete records for older titles, hurriedly input during a retrospective conversion project, is as frustrating as finding poor records for new titles."

" . . . it has to be as complete a record as possible to satisfy the needs of the greatest number of libraries using the data base."

"I believe an effort should be made to reduce the charge for use of a K level record. RLIN charges the inputting library \$1.50 for each sub-standard record input."

"We would prefer consideration in just the opposite direction, that is, we strongly urge a level between K and I to be mandatory for retrospective conversion."

B. Lowering of standards only with Enhance capabilities: 15

"When the enhancement capability is operational we would consider a special minimal standard for retrospectively converted records but not at this time."

"If OCLC would solve their problem of permitting member libraries to upgrade, this use of K or below K would not be so serious."

"Until then, (Enhance), I think the quality of the data base would be adversely affected."

" . . . but only if the next library using the record can input the missing items into the data base."

C. Lower standards OK: 21

Access to bibliographic information or piece difficult: 9

Cost too high: 6

Smaller libraries don't need extensive records: 4

Special code for retro record identification: 3

Our uses demand only skeleton records: 3

Old records probably won't be used by others: 3

Increase size of data base: 2

"Establishing minimal standards for retrospective conversion clearly does have certain advantages. Any form of conversion will be costly and simplifying that process would be worthwhile."

"A symbol indicating that the record has been input as part of a retrocon project would be very helpful."

" . . . medium and small size public libraries and school libraries can operate with less than K Level cataloging."

"I am working from a remote location where the books in question are not immediately available to me."

" . . . if OCLC's standards for conversion input are higher than we can afford, we will not use OCLC"

"I don't think a library should be expected to recatalog an item. So long as they have information to describe a unique bibliographic element and they are satisfied to put their symbol in the 040"

"I feel there is a strong need for data base quality control; however, for our library to effectively use the system, we must input some inferior level records."

D. Other comments: 25

Specific problems: 5

Waiting to do original input in retrocon: 4

Incentive for error reports: 2

" . . . we do not use the Retrospective Conversion Project but recatalog with the book in hand"

"Have you considered the minimal level national level bibliographic record . . . ?"

"Retrospective conversion is our contribution to interlibrary cooperation."

"Would such records be subject to error report counts?"

(Draft Guidelines)

RESEARCH LIBRARIES GROUP, INC.

Retrospective Conversion

In order to meet one of its primary goals, that is, to build sophisticated tools to help libraries maintain bibliographic control over their materials, The Research Libraries Group provides member libraries with an opportunity to convert manually-produced cataloging records into machine-readable form. The value of retrospective conversion (hereafter, RECON) to individual libraries includes providing the library with a larger data base to be used as a basis for future on-line catalogs, providing a library with records which are more easily maintained, providing a library with a larger file of records to be used for reference activities. The value of RECON projects for RLG as a whole includes those points mentioned above. In addition, the larger data base supports programs of shared cataloging among members and supports the RLG shared resources programs. RECON, therefore, is an important way to achieve the goals of RLG in a number of areas.

This document describes the procedure for requesting approval of RECON projects, criteria for evaluating such requests, and a procedure for making decisions about RECON requests. In addition, The Research Libraries Group has defined a cataloging/content designation standard for RECON projects (Appendix A) and has developed a rate schedule for RECON projects (Appendix B). Both the cataloging/content designation standard and the rate schedule recognize the value of RECON both for individual libraries seeking to provide better access to materials through searching of on-line files and catalogs and for members of RLG and users of the RLIN network attempting to reduce the costs of cataloging and identify holdings for the purposes of shared access programs.

The procedure to be followed for making a decision on RECON project requests is described in detail in Section I. In general, the decision is made on the basis of the criteria defined in Section II; the importance of each of the criteria will vary, however, depending on the specific request, on the capacity of the RLIN system to support the additional processing involved, and on the financial implications of a project.

I. Application for Approval and Evaluation of RECON Projects

The following outline describes the general procedure to be followed to apply for approval of a RECON project and the steps taken during the evaluation process.

1. Library prepares application on form obtained from Library Operations Division, RLG.

2. Library submits completed form to the President of RLG for review and decision.
3. The President may refer the application to the RLG Board of Governors which evaluates the application on the basis of the criteria described in Section II.

The Board of Governors and the President of RLG may call on the RLG central staff, or on RLG advisory committees, or both, for advice when necessary. For example, the BIBTECH Subcommittee on Bibliographic Standards may be asked to look at samples of cataloging for the collection, or the Collection Development and Management Committee might be asked for an evaluation of

4. The President of RLG makes a decision about taking proposals for RECON projects to the Board of Governors.
5. The Board of Governors makes a decision to the President of RLG about the project.

II. Evaluation of RECON Projects

Proposed RECON projects are evaluated according to consistently-applied criteria agreed upon by members of the Research Libraries Group. These criteria are concerned primarily with the bibliographic aspects of the project, that is, they attempt to define the value of the project for shared access programs and shared cataloging/acquisitions programs. In addition, however, factors such as the effect of any RECON project on the RLIN system in terms of load on the system and the financial effects of any project must be considered during the decision-making process.

A. Bibliographic Criteria

It is understood that a RECON project may have as its principal focus benefit to the individual library. Although this is considered an important criterion, the value of the RECON project to RLG as a whole must also be considered; a description of the primary value of the project for RLG as a whole should appear in the application, with an indication of whether the project is intended to serve primarily public service activities or shared cataloging activities. Depending on the intended primary value of the project the factors listed below may be weighed differently when they are applied.

In general, the criteria described in this section emphasize the content or subject-orientation of a collection although

a RECON project may not necessarily be subject-oriented.

1. Collection-Related Criteria

- a. Uniqueness. Questions asked would include: Is this collection unique within RLG? In the nation?
- b. Comprehensiveness. Questions asked would include: Does this collection comprehensively cover the field? Is there any relationship between this collection and another included in the RLIN Bibliographic Data Base?
- c. Future of the Collection. Questions asked might include: Will the library continue to support the development of this collection? How is such a commitment reflected in the collection development statement describing collecting level for this collection?
- d. Availability of the Collection. Questions asked might include: Will this collection be made available to users of all RLG member libraries? In what form will this access be available?

2. Processing-Related Criteria

- a. Cataloging Level. Questions asked might include: What is the level of cataloging of the records in this collection? What is the standard followed? What is the level of staff assigned to cataloging this collection? What kind of specialists handle the cataloging?
- b. Quality of records. Highest quality, i.e., current full level RLIN standards, is to be encouraged in RECON projects.
- c. Future of Processing. Questions asked might include: What are the library's plans for continuing input of standard level cataloging for this collection? What is the processing priority for this collection within the library?

B. Financial Considerations

The costs of RECON projects are substantial both to the library carrying out the project and committing staff, equipment and space to the project, and to RLG as a member-owned organization which commits staff support and machine resources to the project. The investment of RLG central staff and machine resources is in effect an investment of all RLG members, since these costs are eventually absorbed by all members. In order to mitigate costs on both levels, members are encouraged to investigate

encouraged to investigate possibilities of external, i.e., non-RLG, funding for RECON projects. RLG central staff are available to work with members to identify and obtain such funding. The success of an RLG member in obtaining external funding will result in a proposal for RECON which is most attractive to most members.

RESEARCH LIBRARIES GROUP
RETROSPECTIVE CONVERSION PLANS
QUESTIONNAIRE

Library _____ Date _____

Please answer the following questions regarding your library's plans for retrospective conversion projects during the next two years. These questions cover projects only, not retrospective conversion which is carried out according to normal processing policies within a library (i.e., "convert to machine-readable form any record for which an added copy is ordered"). Please fill out a separate form for each project.

1. Describe briefly the scope of your planned recon project in terms of the collection(s) included. Describe also the general level of cataloging if possible.

2. How many titles do you expect to convert during the course of the project?

_____ Total titles

_____ Monograph titles

_____ Serial titles

_____ Titles in other formats (please specify which formats)

3. How long will this recon project take to complete? _____ months

At what rate do you expect to convert records? _____ records per month

4. When do you expect to begin the project? _____ date

_____ Signature of person completing questionnaire

_____ Title of person completing questionnaire



AND UNION LIBRARY CATALOGUE OF PENNSYLVANIA

3420 WALNUT STREET PHILADELPHIA, PENNSYLVANIA 19104

TEL.: ULC 215-382-5104

PALINET 215-342-7031

Information on Retrospective Conversion
Projects being conducted by Palinet Libraries

Revised
August 1978

To: Cataloging Supervisors of PALINET Libraries

From: James G. Schoenung, Executive Director

Subject: Retrospective Conversion of Cataloging on OCLC

Some libraries are already engaged in partial or complete retrospective conversion of their catalogs to the OCLC system and many are contemplating conversion. The following information is offered to all libraries as guidelines for consideration before undertaking such a project.

Definition

Retrospective conversion involves searching the OCLC on-line catalog for records corresponding to the editions recorded in the library shelflist or catalog. When a record is found matching an edition cataloged by the library, the record is edited as necessary and the Update key is used to accomplish this conversion. When a record is not found in OCLC, any record for a variant edition is identified by OCLC number so that it may be revised for adding a new record to the OCLC on-line catalog, or the shelflist record is identified as one that must be added by input on a workform.

Update function

The Update function used in converting records adds the library's three-letter institution symbol to the bibliographic record in OCLC's on-line union catalog, indicating ownership of the item. Updating also adds the record to OCLC's "archive" tape file for storage, and adds the record to an OCLC MARC tape for libraries subscribing to the tapes.

The Update function does not print catalog cards nor add the record to an Accessions List (for libraries subscribing to the latter service).

The Updates will be reported on OCLC's monthly statistics of system use which are distributed to library directors.

The OCLC Board of Trustees has established an exemption from First-Time Use charges for use of UPDATE when a library adds its institution symbol to a record under an OCLC-approved Retrospective Conversion Project (OCLC will make a full FTU charge when an institution employs the PRODUCE function while logged in under a Retrospective Conversion Authorization).

Retrospective Conversion Projects that qualify for the exemption from FTU charges must be defined by the following:

- 1) estimated total number of items to be converted
- 2) estimated duration (in years) of the project
- 3) number of items to be converted annually

For a library to be eligible for the Retrospective Conversion exemption, a Retrospective Conversion Project Definition form and OCLC Authorization Request must be obtained from the PALINET Office. These forms should then be completed and sent to PALINET for submission to OCLC. The goldenrod copy of the multiple Retrospective Conversion Project Definition form should be retained for the library's records. Project definitions will be reviewed annually.

The OCLC Authorization Request must include the names of all persons who will do retrospective conversion, specifying "retro. conv." as the Type of Activity. All persons authorized for retrospective conversion will operate in Full mode; Partial mode is not provided for retrospective conversion. Provide the names of persons and the name or initials to be displayed in response to log-on. Additions and deletions of names should be requested on copies of the form as they are required.

PALINET will inform the library of the authorization numbers assigned by OCLC, at which time the library can begin using the numbers when converting materials.

Editing records; future on-line holdings information

In performing retrospective conversion, records should be edited at least to include the library's classification number of the item if it does not conform to a classification number on the record, and to include in the 049 field at least the proper four-letter Holding Library symbol(s) for each location of the item in the collection. Otherwise, on-line holdings records to be created by OCLC at some indefinite future time from its past "archive" files of all libraries' cataloging will contain inaccurate call numbers and Holding Library locations.

The library has the option of inputting additional holdings information in the 049 field - copy numbers, accession numbers, volume numbers for sets - to create complete holdings data for future on-line shelf list access at such time as holdings information is displayed and call number indexing is available. Input instructions are found in the OCLC document, "Definition and Use of the 049 Holdings Field".

For most libraries, future on-line local holdings records created by OCLC from "archive" tapes of past cataloging activity will not reflect current holdings information. OCLC holdings records for which copies or volumes were recorded only in the library's shelflist after initial catalog card production on OCLC will not include the additional information. Any OCLC record used more than once in cataloging will carry only the last holdings information entered since OCLC will create the on-line holdings records from only the latest Produce or Update of a bibliographic record and not from the multiple occurrences of the record. These on-line holdings records created by OCLC from past cataloging activity will have to be edited by comparing them with the library's shelflist of OCLC cards for any library to have a current accurate on-line record of holdings of all items previously cataloged on the OCLC system.

Any library contemplating complete retrospective conversion for its entire collection should certainly consider entering full holdings information (copies, volumes, etc.) in the 049 field so that future re-editing would be unnecessary. This approach would require, that, until OCLC makes on-line holdings records display available at some indefinite future time, any time holdings are added for an item previously cataloged, the 049 field of the bibliographic record would have to be completed to show current holdings, the call number on the record revised (if necessary) to conform to the library's call number, and the record Updated. However, this activity should be less effort and cost less than going through the shelflist a second time at some future date to add this information and create an on-line shelflist.

Libraries with a subscription for OCLC MARC tapes to receive cataloging records for local applications may want to edit records further to correspond to local cataloging.

Retrospective conversion records on OCLC MARC tape subscriptions

Any library with a subscription to OCLC MARC tapes will receive on the tapes all records Updated in retrospective conversion. These records are distinguished as Updates, as distinct from records Produced, by a Transaction Type Code 02 in Byte Position 22 of the Leader for each record.

The records Updated will, of course, add to the volume and cost of the tape subscription.

Libraries with tape subscriptions may want to edit records to the extent necessary so that they conform to local cataloging. Such editing could include choice and form of entry, description, and subject and added entry tracings. This additional editing will, of course, add to the time required for conversion.

Any library contemplating complete retrospective conversion of its entire collection on OCLC should also seriously consider subscribing to the OCLC MARC Tape service prior to beginning conversion. These tapes can be acquired at relatively low cost from OCLC to provide a machine-readable record of the library's holdings. With growing interest in alternatives to card catalogs, chiefly computer output microfilm (COM) catalogs, and future changes in cataloging with adoption of AACR2, maintaining a tape file of machine-readable cataloging data will allow the library many options in adapting to future requirements of bibliographic control. Librarians may consult the PALINET Office for more information concerning the uses of OCLC MARC Tapes.

Procedures for conversion

Since a retrospective conversion project involves work beyond current cataloging activity, it is recommended that conversion be undertaken only after cataloging staff have developed an adequate understanding of the operation of the OCLC system and its impact on internal cataloging operations.

Conversion projects are typically organized to take advantage of evening hours of operation to 10:00 P.M. and Saturdays 8:00 A.M. to 8:00 P.M.

Part-time temporary personnel at the nonprofessional level may be assigned to the major portion of the work, which should be well-defined as to requirements and limitations on decisions involved.

The major requirement will be recognition of elements of bibliographic information and the ability to determine whether an OCLC record matching the library's catalog record identifies the same edition. A record for varying edition would have to be identified for a decision whether to accept that record for Updating or to add a new record to the OCLC on-line catalog for a different edition.

Actual terminal operation in conversion is not complicated. Searching is easily learned in a few hours. Editing call numbers and the 049 field follows explicit format instructions in the PALINET Manual and OCLC's On-Line Cataloging and Definition and Use of the 049 Holdings Field. Sending fields and the use of the Update key are simple operations.

Conversion projects are typically conducted in two stages. Personnel at the nonprofessional level search to locate matching records, then edit call number and holdings and Update for matching records. Library records which don't match or which aren't found are referred to professional level personnel for preparing input cataloging to add new records, either simultaneously with the Updating of existing records or at some time after all Updates of existing records have been completed.

Adding new records not in the OCLC on-line catalog to complete conversion

All catalog records added to the OCLC on-line catalog as part of the conversion project, whether input on a workform or using the NEW command to create a new record by revising an existing record, should reflect whenever possible OCLC's Level I Input Standards for full cataloging as defined in OCLC's document, "OCLC Level I and Level K Input Standards" (Nov. 1977). When not feasible, libraries may input less-than-full cataloging, following the Level K Standard, and enter "K", rather than "I", as the 'Enc lvl' in the fixed field. Older LC cataloging may be modernized according to guidelines for "Transcription of LC Cataloging" (p. 4-9 of "OCLC Level I and Level K Input Standards"). Obsolete LC subject headings are also to be updated. However, non-ISBD(M) records are not to be converted to ISBD(M) form unless complete recataloging is done.

If shelflist entries used as the basis for conversion do not have complete cataloging information, complete records, either from the library's catalog or found in the LC and NUC catalogs, may be used as the basis for input rather than entering incomplete records.

Reports of conversion activity

Several medium-sized academic libraries in PALINET have been engaged in conversion projects for a year or more. All are utilizing evening and weekend hours, some early morning and occasional daytime hours. Reports of activity uniformly indicate finding matching records for as much as 85% to 95% of the items searched, varying somewhat for certain subject areas.

The rate of records Updated hourly, including editing call numbers and 049 holdings information, has varied at times from 25 to as many as 100, with an average of 45 per hour. This does not include any input cataloging, which may average from 5-10 per hour for inputting workforms on the terminal from worksheets prepared with cataloging information and MARC format coding.

MORE on page five

Profile of OCLC On-Line Catalog as of March 2, 1978Publication Date Distribution: Monographs (Books)

Statistics for publication dates of books in the OCLC on-line catalog indicate a sizeable data base to support conversion, resulting primarily from conversion projects undertaken by many libraries in the OCLC network.

<u>Publication Dates</u>	<u>LC Records</u>	<u>Member-Input Records</u>	<u>Total</u>	<u>Percent</u>	<u>Records Added 3/2/77-3/2/78</u>
1801-1900	3,921	197,568	201,489	6%	66,007
1901-1950	8,964	576,556	585,520	17%	144,951
1951-1960	11,423	261,657	273,080	8%	46,881
1961-1970	348,192	463,335	811,527	24%	125,262
1971-1975	387,044	498,789	885,833	26%	130,785
1976	98,951	415,657	514,608	15%	410,311
1977	53,226	67,546	120,608	4%	113,558
1978	10,029	1,335	11,364		11,364
Total	921,750	2,482,443	3,404,193	100%	1,056,243

Language Distribution: Monographs (Books)

English	2,518,123	Dutch	12,581	Norwegian	3,376
German	200,229	Polish	11,154	Finnish	2,322
French	178,960	Swedish	7,504		
Spanish	161,016	Danish	5,086		
Italian	49,529	Czech	3,827		
Portuguese	34,497	Hungarian	3,671		
Russian	21,500	Lithuanian	3,440		
Latin	13,414	Rumanian	3,386		

Records of non-book materials

	<u>LC Records</u>	<u>Member-Input Records</u>	<u>Total Records</u>	<u>Records Used by Libraries other than Inputting Library</u>
Serials	73,525	158,964	232,489	63,637
Current serials			137,227	
Music scores	11	58,732	58,743	28,093
Films	8	43,104	43,112	5,898
Sound recordings	2	37,442	37,444	13,170
Manuscripts	1	10,890	10,891	324
Maps	1	1,828	1,829	294

Note: More detailed statistics identifying yearly publication dates and all languages for all types of materials are available upon inquiry to the PALINET Office.

WM. PATTERSON HALL LIBRARY

May 17, 1978

To: Robert L. Goldberg

From: Hilary E. Kwon

RETROSPECTIVE SHEFLIST CONVERSION PROJECT

- I. A theoretical approach to the project yields the following results, based upon a survey undertaken prior to implementation of the conversion:

A. Time study:

Based on the sample search of 254 titles via OCLC data base the findings are as follows:

Perfect matching record	102 titles	76 per cent
Need changes	46 titles	18 per cent
New (different edition)	3 titles	1 per cent
Original cataloging	13 titles	5 per cent
Total	254 titles	100 per cent

B. Application:

If we apply the above findings to our collection of approximately 200,000 titles to be converted it will take 3.76 years with one CETA person and 1.88 years with two CETA persons inputting. It is assumed that 94 per cent of our titles can be handled by CETA personnel, with three days extensive training; and 6 per cent requiring professional time. The following represents a detailed description:

May 12, 1978

Page two

To: Robert L. Goldberg

From: Hidon K. Kwon

1. Utilizing one CETA person

200,000 Titles

x 94 per cent

188,000 Titles

÷ 40 Titles/Hr.*

4,700 Hrs.

÷ 5 Hrs./Day*

940 Days

200,000 Titles

x 6 per cent

12,000 Titles

÷ 5 Titles/Hr.**

2,400 Hrs.

÷ 5 Hrs./Day*

480 Days

940 Days divided by 250 working days/yr. equals 3.76 years. Since the professional part of the project is progressing concurrently with the non-professional task, the longest time period only is counted.

2. Utilizing two CETA persons:

200,000 Titles

x 94 per cent

188,000 Titles

÷ 40 Titles/Hr.

4,700 Hrs.

÷ 10 Hrs./Day

470 Days

470 Days divided by 250 working days/yr. equals 1.88 years.

II. A study of anticipated time allotments undertaken after the implementation of the project on March 13, 1978 yielded the following more realistic results.

*Derived from PALMET statistics and recommendations.

**Includes only inputting workforms.

Page three

To: Robert I. Goldberg

From: Eldon E. Mason

- A. At present one CETA person is participating in the Project.

200,000 Titles

200,000

x 94 per cent

x 6 per cent

188,000 Titles

12,000 Titles

$\div$ 40 Titles/Hr.

$\div$ 2 Titles/Hr. **

4,700 Hrs.

6,000 Hrs.

$\div$ 5 Hrs./Day *

$\div$ 2 Hrs./Day ***

940 Days

3,000 Days

940 Days are used by CETA and professional concurrently. 2,060 extra days are required for the professional part of the project.

940 Days yields 4.27 yrs. when 220 actual working days are counted per yr.
2,060 Days extra yields 9.36 yrs. with 220 working days counted.

- B. 4.27 and 9.36 years equal 13.63 years with one CETA person and rotating professional staff implementing the process.

- C. It should be noted that approximately 90 per cent of the project could be completed in about 4 years utilizing present staffing patterns. The addition of another CETA person could lower this figure to about 2 years.

* Maximum number of hours one person can operate terminal per day.

** This figure includes searching on terminal, workform preparation, inputting records, and checking of inputting for a total of $3\frac{1}{4}$ minutes/title or 2 titles/hr.

*** Professionals participate in inputting of retrospective records on the night and rotating Saturday they are scheduled for supervisory duty. Unlike the non-professional CETA personnel with full-time dedication to the project, each professional has incorporated the procedures into her regular work schedules and routines and can, therefore, dedicate only two hours weekly to the project.

WM. PATERSON COLLEGE N. J. LIBRARY

OCLC RETROSPECTIVE SHEFLIST CONVERSION

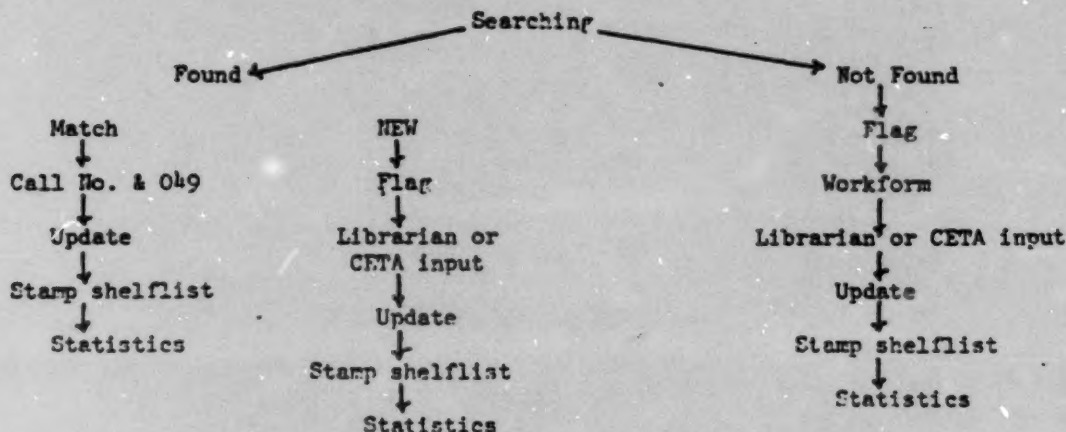
Procedures

I. General considerations

- A. Only records not previously entered into the OCLC data bank are to be treated for updating.
- B. The project will be conducted in two stages. Personnel at the nonprofessional level will search to locate matching records, then edit call number and update for matching records. Library records which don't match or which aren't found are referred to professional level personnel for preparing input cataloging to add new records.
- C. All catalog records added to the OCLC on-line catalog as part of the conversion project, whether input on a workform or using the NEW command to create a new records by revising an existing records, must meet OCLC's current standards for input cataloging.
- D. The collection shall be processed in order as follows:
 1. Ref.
 2. Art
 3. Circulating collection, A-2
 4. Juv. ref.
 5. Juv. circulating, 000-999.
 6. A-V)
 7. Microforms) Future considerations.
 8. Thesis)
- E. Updating shall be processed by each person handling one shelflist drawer at a time and one shelflist card at a time.

II. Specific procedures on the terminal:

A. Flow chart of operations



B. Searching.

1. Log in on Partial mode authorization number (69-0660-747), and special authorization number as soon as it is available from OCLC.
2. Search the OCLC terminal data base using shelflist card (see p. 8 of Palinet manual and chart). Do not search shelflist card previously produced by OCLC.

Art
N Scott, Ian Jonathan.
6923 Piranesi / Jonathan Scott. London :
.Ph95 Academy Editions ; New York : St.
S36 Martin's Press, 1975.
1975 336 p. : ill. ; 31 cm.
Includes bibliographical references
and index.

1. Piranesi, Giovanni Battista,
1720-1778.

NJWP 22 FEB 78 1864998 NJPA51 74-81701

- a. LC card no. 1 on shelflist card.
 - b. Author/title
 - c. Title.
 - d. When records are found, check holdings symbols. If NJP appears, do not update. Stamp shelflist in lower right corner in red OCLC and file in shelflist drawer.
3. If OCLC record matches perfectly (call no. [050 or 090 field] may differ), procede to C.
 4. If OCLC record does not match perfectly, i.e., same author (100, 110, 111) and title (130, 245) but different date, publisher (260) or paging (300), write OCLC search no. in lower left corner of shelflist in pencil. Put red flag in front of shelflist card and REFILE IN DRAWER. (That record required NEW input)
 5. If there is no record of that book in OCLC (or any other edition of the title), put a green flag in front of shelflist card and refile in drawer.
 6. If there are supplements, annuals, etc. dash added to card but which do not appear on OCLC record, follow procedure below:

a. Sample:

Ref.		shelf list
AE5	The Encyclopedia Americana. International ed. New York,	
.E333	Americana Corp. [1975]	
1975	30 v. illus. 27 cm.	
	Published 1874-1858 under title: Encyclopaedia Americana; 1907-1912: The Americana.	
Ref.		
AE	Includes bibliographical references.	
5	Annual. International ed. New York,	
.E333	Americana Corp., 1976.	
1975	624 p. illus. 27 cm.	
Suppl.	Title page reads: The Americana Annual.	
	1. Encyclopaedia and dictionaries.	

AE5.E333 1975
ISBN 0-7172-0108-6

031

74-11347
MARC

B. Searching (continued)

6. continued

- b. Check and update record for main volume.
- c. Count main volume.
- d. Search OCLC data bank for record with the suppl., annual, etc. If found, check, update, stamp and count.
- e. If not found, pencil check mark the updated portion of card and flag card with green flag for original cataloging.
- f. Follow procedure for original cataloging. After cataloging update, pull shelflist card, erase pencilled note, stamp in red on lower right corner OCLC, count, and refile.

C. Updating

1. When records match perfectly they can be immediately updated:

- a. Check call no. (050 or 090 tag)
- b. If it matches number on shelflist card procede to step f
- c. If it does not match:

- 1) Input the classification no. that we have used (see p.78-82 and 205 of On-line cataloging.)
- 2) Advance and send
- 3) Check that change is accepted ("field corrected")
- 4) Proceed to step f

d. If book is a ref. or art, curr. mats. dpet. or A-V:

1) Enter correct symbol in holding field (049)

- a) Ref = r
- b) Art = a
- c) CMD R = d
- d) CMD circ = c
- e) CMD A- = e
- f) A-V = v
- g) Microform = t

2) Advance and send

- a) If shelflist says "dup in circ", the procedure for indicating two locations must be followed. The instructions for inputting that data are taped in front of the terminal on the desk. The instructions for marking the circulating shelflist is listed under off-terminal procedures.

3) Check that change is accepted ("field corrected")

h) Proceed to step f

- e. Add size if needed (add only if on shelflist card)
- Add paging if needed (add only if on shelflist card)

- f. Update record by depressing update key and watch for response ("Record updated")

C. Updating (continued)

1. (continued)

- g. Stamp shelflist card in lower right corner in red OCLC.
- h. Enter in statistics form.
- i. Put shelflist card back in drawer.
- j. Take out next shelflist card and continue procedure.

2. When records do not match perfectly, but do have some elements that can be used for update (author and title), they are treated as new records (or in some rare cases, our records should be changed to agree with OCLC record; e.g. we originally cataloged as 2 separate volumes, but DLC/DLC cataloged a 2 vol. set; we should change to DLC). This involves pulling our cards and bringing book for changes.

- a. Recall record using OCLC search no. in lower left corner of shelflist card.
- b. Request NEW, send.
- c. Complete fixed field:
 - 1) Language
 - 2) Encoding level (1)
 - 3) Date
- d. Input data using correct form (see MARC description for retrosp.)
 - 1) Input our call no.
 - 2) Check and correct 049 field if necessary.
 - 3) Check and correct imprint and collation.
 - 4) Check and correct subject headings, if necessary.
- e. Update, pull, and stamp shelflist in lower right corner OCLC, count, and refile.

3. When records are not found in OCLC data base original cataloging via a workform is required.

- a. Fill out workform using information on shelflist. If shelflist is not complete, have main entry card copied on off-terminal time. Use main entry for information.
- b. Complete required fixed field areas (use 1 for enc. level) See bulletin on completing fixed fields. Add holdings to 049 field when needed.
- c. Input workform data on terminal. Put into save. (Save, send.)
- d. The next librarian on duty will recall from save and check inputting.
- e. If data is correct, update.
- f. Pull and stamp shelflist in red OCLC in lower right corner.
- g. Enter on statistics sheet.

III. Procedures off terminal.

A. Machine copying shelflist or main entry for NEW or original cataloging. (CETA)

- 1. Remove flagged shelflist.
- 2. Copy on copying machine.

III. Procedures off terminal (continued)

A. (continued)

3. Mark on copy either New or orig.
4. Refile shelflist without flag.
5. Clip copy of fixed field to copy of card.
6. Give copies to cataloger on duty.

B. Pulling books and cards when changes in our cataloging is required (CETA)

1. Refer to instructions on pulling cards. Make temp. card with correct call number, date and initial.
2. Retrieve book from shelf.
3. Give book and cards to librarian who will follow procedures for corrections.
4. Type new card and pocket and new spine label.

C. Preparing workforms (CETA and librarian)

D. Pulling serials cards for holdings (when needed) CETA

- E. Stamping shelflists for holdings in two locations, e.g. Ref. and circ. The call number of the item should be recorded while operator is inputting data on terminal. Off-terminal, the circulating shelflist should be pulled and stamped OCLC in red in lower right corner. This prevents the accidental reentering of the record into the OCLC data base.

Planning a Retrospective Conversion Project

by

Lou Wetherbee

What is the basis of current interest in retrospective conversion and alternative catalogs? Every library conference or seminar recently has one or more sessions devoted to the alternative catalog, COM or online. There is a great body of information published and spoken about what the new catalogs should be and do, how they should look, and what they will do for the library user. But there is not much written yet about the process of converting your 3x5 cards to some form that will permit machine manipulation. That is probably due to the fact that catalogers rarely document processes outside their own institutions -- they simply catalog. There is no standard manual or procedure to guide the library who wants to convert. I hope today we can collectively help fill that need for information.

To introduce the topic of retrospective conversion and set the stage for the other speakers I'd like to discuss suggested guidelines in preparing for machine conversion. Conversion of catalogs is not a new idea -- it has been going on for centuries as the structure of the catalog has evolved. It is important to understand retroconversion as a single component, albeit an important one, in the overall evolution of library technology. To place this 20th century version of catalog recreation into context, let me review the history of the Bodleian Library catalogs. The first catalog of the Bodleian was published in July 1605, the second in 1620, the third in 1674. By 1697, the curators of the library with zeal reminiscent of the spirit of modern library networks asked the staff for suggestions on improving the catalog, creating, thereby, perhaps the earliest "task force known on Alternatives to the Card Catalog."

Listen to the plan suggested by the staff to the Library Administration. You will be interested I think by the similarities of conversion in the 17th and 20th century. In three centuries the only real change in converting library catalogs has been the addition of new tools to effect the conversion. Modern catalogers have a CRT where earlier libraries used quills and folio size notebooks.

Now for a historical look at retroconversion:

... A new Catalogue being a vast undertaking, too much caution cannot be used. One way of taking such a general Catalogue may be this. Suppose a dozen or more Learned men, who are likewise supposed to know books better than others, meet so many times a week, for a month of two, and consult together for the best method in placing the books, as whether it be best to place all books of a bigness together or all books of a Faculty Science, together, with respect to their height; or placing the different editions of every author together, the oldest first. To consult whether books with gilt backs should stand with their backs out or not; whether authors should be placed in alphabetical order as to their names or not; whether a Donation should be placed by itself in the library or in the benefaction book. Whether particular notice ought to be taken of any different Readings, or other Learned Notes written in the books, by knowing men. (Obviously, they had the same problems we have with gift materials, shelf order and the proper length of cataloger's notes.)

Whether the Title & date of every book should not be expressed in the Language of the book. To consult about the Method of drawing up a Catalogue from the books so placed. As to whether it be not the best way to express the book, that a Scholar may know what book is meant tho' he does not see the book itself. Whether when a book contains many different Tracts of Several Authors, under one general Title, Every Author & Tract ought not to be expressed in the Catalogue. (The questions of analytics) Whether upon any General Head, or Author, the names of all those Authors or books that any way illustrate the others ought not to be carefully put down. (How many and what kind of added entries do we need) Whether they ought not to say expressly such a book is a folio, etc. -- Whether the names of eminent printers ought not to be remembered with the Place, & year etc. Whether the Catalogue should follow the method of the Bibliotheca Thiana, or Telleriana, etc. or be put in alphabetical order as it is now (Do we want a Divided or dictionary catalog) When a book has no Place or Date, whether it ought not to be put in sine loco, sine-anno, etc. Whether the First & Best Editions ought to be marked. Whether the most rare books ought to be distinguished, with a short note of the Price, etc.

When all are agreed & perfectly well versed in the method designed for placing the books, & drawing up the catalog (or, you might say, when the task force report has been approved); leave might be had from the house of Convocation (here's how they planned their retro project) for the Library to be shut up in the Long Vacation, at which time said Learned Men (I like to think of them as the first retrocon staff) should place the books first into the New Order, then, each knowing his own part of the Library, take an exact Catalogue of those books that fall to his share, which Catalogue might fall pretty well into alphabetical order, he having three times more paper than he shall fill up, and that Divided into Letters A.B.C. etc. ... Then with a catalogue of the large leaves, one of the

Learned men should insert those books which have come in since ... 1674, rectify any mistakes or omissions, alter the directions of those books that were in the library before (sounds suspiciously like recataloging to me), and finally dashing those books which having been once in the Library are not to be found now.

The task force report closed with this bit of P.R. for the Administration and the library users:

When this Catalogue has been diligently perused, it may be printed forthwith and this perhaps may be a short & quick way to accomplish so great a work; such a Catalogue being the most accurate as well as the Largest that ever was, must needs sell."¹

I shared this account with you to put retrospective conversion into its proper place. It is certainly not a new task to libraries -- the only real difference I can see in the 1697 retroconversion project and the ones your libraries now are or may soon be undertaking is the mechanism. We have inserted a machine into the process.

In planning for your own retrospective conversion and implementing the project, regardless of whether you do the work in-house or contract it out, I would like to suggest eight steps in planning and implementing a successful project. They are:

- I. Determine the need for retrospective conversion in your institution
- II. Define the scope of the project as specifically as possible
- III. Determine the availability of resources to undertake the project
- IV. Make a detailed plan of action
- V. Select a method or methods for conversion
- VI. Implement the project

¹ Dorothy May Morris. A History of Cataloguing and Cataloguing Methods 1100 - 1850. London: Grafton, 1939. pp. 152-153.

VII. Review the project objectives and accomplishments continually

VIII. Assess the results of your efforts upon completion

Let's explore each of these areas briefly. For what purposes will your converted records be used? You should consider carefully the use or uses that will be made of your converted records. You may need a total catalog replacement for whatever reason, poor cataloging, brief cataloging, etc. You may wish other processes such as acquisitions or circulation using the same machine readable information. Or, such processes may already be automated, thereby tending to force catalog conversion. In any case, you need a firm idea of desired products in mind before you undertake conversion or you risk coming up with a converted file unsuited or only partially suited to your needs.

To help you assess your needs, there is relatively little published literature. You may wish to consult V. 14, No. 2 of Library Technology Reports, April 1978, "The Conversion of Manual Catalogs to Collection Data Bases by Brett Butler" and two associates. This publication can bring into focus some of the issues in deciding on conversion and what data elements are necessary for what uses. For example, conversion for circulation alone requires substantially fewer data elements in each individual record than conversion for a COM or Online Catalog.

I have supplied you with a chart from the LTR article. You could adapt it in deciding what data elements you need to be concerned with in your conversion effort. Note that Butler suggests what elements need to be included in machine readable records for various uses.

Now let's consider the scope of the project. This is a catch all area where you should consider many issues:

Before you select a conversion method you must have information about your own catalog available for decision making. What is the size of the collection? Does the current catalog represent the books on the shelf adequately? Is any portion of the collection uncataloged or inadequately cataloged? What portion of the

collection is already in MARC form? In short, what is the state of bibliographic control of your collection? If you have great numbers of poor or brief records, your conversion project could quickly turn into a massive and expensive recataloging effort. The LTR report suggests that while the "intellectual work required in retroconversion is ... less than it would be in a total recataloging effort, ... the manual and clerical parts of the process are just as large and important. The step of editing and verifying records is crucial. The quality of the final product absolutely depends on it.

You should thoroughly assess your bibliographic record files and evaluate your source records. Can you convert from a single existing file? Will you have to combine two or more records to obtain a complete record? What percentage of foreign language cataloging do you have? And what other special or unique collections will need to be evaluated?

Next do an analysis of your source records. Is the cataloging complete? Are the cards physically legible without extensive interpretation? If you are planning to use OCLC or some other online file, sample the file. What percent usable records are available? Will the conversion staff be able to make intelligent decisions based on the source document or will they need to retrieve the books? In the conversion project at my network, brief unclear shelflist records are a major headache. What constitutes an acceptable record? What standards will you follow?

Armed with this information you are in a good position to move on to step 3 which is one of the most important planning steps you face. What resources, human, fiscal and bibliographic do you have available? This will be the stage when you begin to seriously consider alternatives. Does in-house staff exist with sufficient expertise to do the conversion? Can you hire extra help? How will the extra cost of the conversion be financed? Do you have room to house extra staff, terminals and other tools? Who will coordinate and monitor the project and who will have the last say on quality control of the project? This step, the evaluation of your resources, is crucial to success. It is costly and inefficient to begin conversion without at least some quantitative idea of your resources and support for the duration of the special project.

Once you have looked at your needs, the size of the project and your resources, you're ready for IV and V.

Using the data you've gathered, you should get down on paper a plan for the total conversion effort. Figure out how many titles you can convert in a given time period and determine how long the project will take. Here is where you actually decide how it will be done. I suggest you visit a library involved in conversion and talk to your network staff to find out who is converting. Get on the phone, ask questions. As your plan develops, you will need to document the decisions you make and share information with other staff. This is also the stage to decide what to do about authority records if you haven't already done so. Will they be converted and if so, how will you do it?

This planning effort leads naturally into step V, the selection of a conversion method. I won't dwell on vendor selection since other speakers will address that. You may find that a mix of conversion methods is best for your library. Don't eliminate any possibilities, and do try to take advantage of any machine readable records that already exist since your main expense, in-house or out, is keyboarding.

Once the decision is made on a method, you're about ready to go if your resources are adequate. The conversion project coordinator will set operational level goals, work out procedures, make a timetable, set up statistical records and most important for any conversion project, hire and monitor staff. In our network conversion project at AMIGOS, our main problem is finding, training and retaining competent staff. If you hire a vendor, it becomes your responsibility to monitor the quality and quantity of the output of his staff. To make it easier to do that, standards and expectations should be clear. I have attached a sample agreement to your handout that we have used with our libraries to document procedures. You might review it to identify areas of concern. Whether you do the project in-house or out, try to maintain detailed written instructions and document all decisions made as records are input. You'll probably need to know what you did about collations, series treatment and oversize designations among other details and you won't necessarily remember a year from now what was done in the 800's or the 300's when half the staff quit and everybody forgot what had been done earlier.

To wrap up then, steps VII and VIII are Review and Assessment.

As the project proceeds, revise and modify project goals and strive to increase efficiency. Meet with involved staff frequently to resolve problems. Maintain close contact with your vendor -- we are in phone contact with some of our conversion libraries 2-3 times a day. Your goal is to maintain momentum and get on with the project. No one wants to make a career out of conversion. The point is to modify the project based on experience.

When you have finished the project, take a 3 week vacation and then do a post mortem. Write a report and explain what you did. Such information will be quite valuable in the creation of an alternative catalog. Share what you have learned with others -- there is almost nothing in the professional literature yet about retroconversion -- some case studies would be very welcome.

To close let me bring you a little more up-to-date on our friends at the Bodleian. By 1900 the staff had created, after those mentioned earlier, three separate new catalogs. The process of catalog recreation continues to the present day, but the problems with catalogs do not alter greatly. In 1850 a commission examined the state of the Bodleian catalog (yes, yes another task force) and one of the commission members made the following statement that reminds me of what catalogers are saying in 1979: "In almost every book which I have absolutely compared with the catalogue, I have found matter of reprehension in the ... entry. I believe that for one entry which is objectionable, there are two at least which contain inaccuracy, confusion, or incompleteness."² We could conclude, I suppose that guess the only question that is new is whether or not the computer will resolve or compound this fundamental problem.

APPENDIX A

THE FUTURE OF THE CATALOG

Background Paper for the Development of Cost Models
for Alternatives to the Card Catalog

Prepared for King Research, Inc.

by

Richard W. Boss

Information Systems Consultants, Inc.

June 30, 1979

Revised September 28, 1979

A. Retrospective Conversion

Conversion from card catalogs into machine-readable form is expensive. Keying the data from shelf list cards costs approximately \$1.36 per card, exclusive of MARC tagging, if one uses the keying costs of commercial data entry organizations as a guide. Most libraries have, therefore, limited their COM catalogs to the titles for which machine-readable bibliographic records are already available. This may change as the bibliographic utilities begin to encourage retrospective conversion projects using the shared cataloging data bases. OCLC now makes no First Time Use (FTU) charge for retrospective conversions, and has estimated that the current cost to the library is \$.67 per record using its system. This was the Florida COMCAT union catalog cost.

A library should not assume that a COM catalog can be generated directly from an archival tape supplied by a bibliographic utility. The MARC communications format developed by LC was designed to facilitate the transfer of records among data bases. It is not an internal operating format. Considerable work is required to use MARC records from other sources to create a COM catalog. Duplicate occurrences of the same item must also be eliminated.

Before the construction of a data base for the production of a COM catalog can begin, the library must decide whether to undertake the project within the institution or whether it will use an outside service agency. The approaches to budgeting are quite different because the service agencies have pricing policies that recover a large percentage of their fixed costs from the first 100,000 records they process for a customer. There are also marketing costs and profits included in the service agency figures. Nevertheless, the prices are firm and the quality is highly predictable. A COM catalog can be started within 60-90 days using a service agency.

B. In-house Production

1. Computer Processing

The University of California at Berkeley has apparently done the most extensive recent study of using existing campus facilities for producing a COM catalog. They have estimated a cost of \$1.50 per thousand access points for computer processing. The cost figure is based on a quotation from their computer center and apparently does not include equipment amortization and all labor costs.

2. Master Fiche Preparation

The cost calculated by University of California at Berkeley is \$1.05 per master fiche of 60 lines. They have estimated 7 lines per full bibliographic record and 3 lines per brief bibliographic record.

3. Service Copies

The University of California at Berkeley has estimated \$.075 per fiche for service copies.

The costs for computer processing six million access points (for a typical large research library this would be 667,000 titles) would, therefore, be \$9,000. If each bibliographic record were full and there were an average of nine for a title, the catalog would consist of 3900 fiche. The cost would be \$4,095 for the master fiche and \$292.50 for each service set. The cost could be reduced by having only one full bibliographic record for each title and brief records at the other points of access. Berkeley has estimated that the file would be reduced to 2400 fiche with a cost of \$2,520 per master and \$180 for each service set.

These figures assume that all of the needed equipment is available and none of its costs is to be charged to the COM catalog project. Overhead costs are also not included, nor all labor. True costs are, therefore, higher.

C. Outside Service Agency

The vast majority of COM catalogs produced to date have been done by one of several commercial firms: Autographics, Baker and Taylor, Blackwell North America, Brodart, and Science Press. We contacted several of these firms and their prices have been generalized for the following sections. These prices are likely to be reduced in a competitive bidding situation.

1. Computer Processing and Master Fiche Production.

Commercial services generally quote this as part of a package price. For example, two firms say they will prepare COM catalogs from existing machine-readable records for \$.06 to \$.10 per record or title, including computer processing (often called conversion by vendors), a master fiche copy, and a small number (2-5) of service copies.

On June 27, 1979 we finally obtained a breakdown of one vendor's price structure:

- a. Changing from the MARC communications format of an OCLC archival tape to the operating format for a library's machine-readable record: \$.05 per title.
- b. Computer processing of the data base and the creation of a master fiche: \$.04 per title.

This vendor does not adjust its price for the length of the bibliographic record or the number of bibliographic records per title in the COM catalog. They have determined that the vast majority of customers have comparable requirements.

We recommend a default figure of \$.09 per title for computer processing and the creation of a master fiche from machine-readable records when a library is going to include 200,000 or less titles in the COM catalog. Larger quantities can be looked up in the tables on the following pages.

The vendors will also accept records prepared by what is called the short-entry method. The short-entry conversion procedure is the most commonly used approach next to the processing of an archival tape from a bibliographic utility. The library

staff types a short entry consisting of the author, short title, call number, LC card number (if available), and location information from its shelf list. The entries are typed on an OCR (Optical Character Recognition) element-equipped typewriter. The vendor reads these records into its data base, ideally a MARC data base, and matches an author, title, and LC card number. All of the apparent matches are printed out for review by the library and, if approved, are subsequently used to create the library's machine-readable data base. The cost of this matching is an additional \$.09 per record for matches against a MARC data base and \$.30 additional per record for matches against another data base. The cost can, therefore, be as low as \$.15 or as high as \$.40. We recommend \$.37 per record.

A circulation data base can also be matched against a service agency's data bases. The results are usually not quite as good as with the short-entry method described above because the quality of most circulation data bases is uneven.

Full entry typing is necessary for all the records that cannot be matched. This is usually from 20 to 40% of a research library's holdings. All keying that must be done costs the library additional money. A figure of \$1.95 per 1000 characters is a reliable estimate. A number of data entry services offer their customers these rates and several of the COM service agencies quote the same rates.

Charges for producing the master film or fiche when a very large conversion from a MARC-formatted data base is done would be:

<u>Titles</u>	<u>Charges</u>
250,000	\$11,475
300,000	13,350
350,000	15,085
400,000	16,680
500,000	19,450
600,000	21,723
700,000	23,380
800,000	24,480
900,000	25,020
1,000,000	25,000
2,000,000	50,000

These costs would include computer processing, but not the preparation of duplicates.

If the library chooses to enter only partial information using OCR equipment and has the vendor match against available machine-readable data bases with full bibliographic records, the charges are typically:

<u>Titles</u>	<u>Charges</u>
250,000	\$ 89,350
300,000	105,900
350,000	122,115

400,000	137,800
500,000	168,000
600,000	196,500
700,000	223,230
800,000	251,600
900,000	283,050
1,000,000	314,500
2,000,000	629,000

The short-entry typing can be accomplished at the rate of 100 titles per hour according to vendors experienced in library conversion projects.

If a library has no machine-readable records available, but can key complete bibliographic information on OCR equipment, the charges typically would be only slightly more than with the provision of an archival tape (but the costs in the library would be six times higher than keying brief entries):

<u>Titles</u>	<u>Charges</u>
250,000	\$13,850
300,000	16,200
350,000	18,445
400,000	20,500
500,000	24,250
600,000	27,600
700,000	30,380
800,000	33,600
900,000	37,800
1,000,000	42,000
2,000,000	84,000

In addition to this start-up cost, a library will incur annual catalog maintenance charges based on the number of new titles added. The charges for converting from a machine-readable data base and from brief records sent in on OCR produced cards are:

<u>Titles Per Year</u>	<u>Machine-Readable</u>	<u>OCR</u>
20,000	\$ 900	\$ 3,200
25,000	1,125	4,000
30,000	1,350	4,800
40,000	1,800	6,400
50,000	2,250	8,000

COM fiche and film are both available. For those who choose COM film, there is an extra charge of up to \$.025 per frame for the master and up to \$.05 per foot for duplication per copy.¹

¹Toronto reports 7 feet of film per fiche for their catalog.

University of Toronto Roberts Library has ten film catalogs for high-use locations and seventy fiche catalogs. The ratio of catalogs to daily users is approximately 1:300.

Frequency of appearance also affects the cost. A typical annual cost schedule for a COM fiche catalog produced four times each year is:

<u>Titles</u>	<u>5 Copies</u>	<u>25 Copies</u>	<u>50 Copies</u>	<u>100 Copies</u>
250,000	\$ 985	\$ 3,385	\$ 6,000	\$ 12,000
500,000	1,816	6,000	12,000	24,000
1,000,000	3,016	12,000	24,000	48,000
2,000,000	4,800	24,000	48,000	96,000

A frequency of six times per year would add 50% to the above charges. Most libraries chose four to six publications per year.

D. Data Base Maintenance Costs

There are costs associated with the intellectual activity of maintaining the machine-readable data base, especially with the authority work. We have not identified any cost studies, but we would expect such costs to be substantially lower than with a card catalog because consultation of the records is so much faster.

The most significant advantage of a catalog based on machine-readable records is the ease of alteration. If an authority control file is linked with the bibliographic records, a single change in the authority control file can update all bibliographic records. The cost comparison of the maintenance of any catalog based on machine-readable records with a card catalog is even more important than the comparison of the creation of the records initially because it is in maintenance that the greatest cost savings may be realized.

We are continuing to research this question but suggest a figure of \$.10 per heading change as a work figure. We had hoped RLIN would have some data as part of its planning for on-line authority control, but no figures were available as late as September, 1979.

SYSTEMWIDE AND INDIVIDUAL LIBRARY DOCUMENTS

"Project Description"

TO Irene Hoadley	PROJECT CODE	ID
FROM Barbara Lucido	DATE January 18, 1978 Revised March 13, 1978	PAGE 1 of 2
SUBJECT Conversion of the Shelflist to a Machine Readable File		REF

I. PURPOSE

The shelflist conversion will provide a machine readable inventory of the University Library's cataloged holdings. The machine readable file will serve as the source of bibliographic and holdings data for implementation of future computer applications within the Library.

II. DESCRIPTION

A. Input Data

The entire shelflist is presently in printed form on approximately 474,000 catalog cards. By previous estimates, each card contains approximately 350 characters. In general, there is one card per catalog entry. OCLC-produced cards will be ignored, as records are available for these entries on OCLC-MARC Subscription tapes.

B. Output Data

The output will be a file of MARC-like records on magnetic tape. Record and file formats must conform to MARC specifications of the Library of Congress and OCLC-MARC specifications of OCLC. These specifications may be found in:

MARC Manual Vol. 1: Subscribers Guide to the MARC
Distribution Service
OCLC-MARC Subscription Service Manual

All cataloging done on the OCLC system since November, 1975, is available on OCLC-MARC Subscription tapes already in the Library or obtainable from the AMIGOS Bibliographic Council on request.

C. Procedure

The project involves the following steps:

1. Investigate two alternatives:

- The Texas Department of Correction (TDC) would key data from the shelflist using MARC tagging and would provide magnetic tape files of the keyed data.
- OCLC would perform retrospective conversion on the OCLC system and would provide tapes through the OCLC-MARC Subscription Service.

ISSUED BY <i>Barbara Lucido</i>	APPROVED BY <i>Irene B. Hoadley 3/15/78</i>	FILE
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PROBLEM DEFINITION

TO Irene Hoadley	PROJECT CODE	ID
FROM Barbara Lucido	DATE January 18, 1978 Revised March 13, 1978	PAGE 2 of 2
SUBJECT Conversion of the Shelflist to a Machine Readable File		REF

2. Describe the physical characteristics of the shelflist for use in estimating costs and time.
3. Receive and verify sample tapes.
4. Prepare cost-benefit analysis for each alternative.
5. Select one alternative and make contract with appropriate agency.
6. Prepare detailed specifications for contracting agency.
7. Prepare shelflist for transmittal to agency.
8. Coordinate activities of contracting agency with those of the University Library. Handle problems in converting specific entries.
9. Edit converted records, as necessary.
10. Review and terminate project.

III. ESTIMATES AND SCHEDULES

Funds budgeted for the shelflist conversion must be spent or encumbered by August 31, 1978.

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ISSUED BY <i>Barbara Lucido</i>	APPROVED BY <i>Irene Hoadley</i>	FILE
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TO Irene Hoadley		ENTRY 1
FROM Barbara Lucido	DATE March 15, 1978	LEVEL File
SUBJECT Description of the Shelflist for Retrospective Conversion		REF PAGE 1 of 1 and 13 page report

The attached report, entitled "Description of Texas A&M University Library's Shelflist for Retrospective Conversion," was written for two reasons:

1. To provide OCLC with information useful for estimating costs of retrospective conversion of TAMUL's shelflist data on the OCLC system, and
2. To obtain information necessary for estimating costs and time for alternative methods of obtaining a machine readable file of shelflist data.

ISSUED BY

APPROVED BY

FILE

DESCRIPTION OF TEXAS A&M UNIVERSITY LIBRARY'S
SHEFLIST FOR RETROSPECTIVE CONVERSION

February 1978

I. PHYSICAL CHARACTERISTICS

The Texas A&M University Library's (TAMUL) shelflist contains approximately 474,000 cards, including approximately 75,000 OCLC catalog entries. OCLC cards will not be converted, as records are available on OCLC-MARC tapes. Thus, at most 399,000 cards must be converted to machine readable form. All numbers given in the rest of this description have been adjusted to omit OCLC cards, unless otherwise mentioned.

Table 1. Sections of shelflist for conversion

Shelflist Section	Approximate Number of Cards
LC classification	274,225
Dewey classification ¹	110,650 (as of January 31, 1978)
Microform	1,600
Curriculum	2,450
Dissertations ²	3,050
Theses ²	6,725
Med.Sci. periodicals	300
Total	399,000 (including approx. 30,000 serials entries)
Excluding Dewey	288,350

¹These are being reclassified to LC at the rate of about 500-600 per month. The dewey shelflist may not be included in the retrospective conversion (see discussion in section II).

²Dissertations and theses would usually be original input.

Cataloging occasionally appears on the back of a card. The information is tracings and an occasional note. This occurs at a rate of about 3-4% overall (including OCLC cards) in the LC shelflist and no more than 1% in the Dewey shelflist, or on approximately 9,334-12,076 cards to be converted.

II. SPECIAL PROCESSING

Holdings Data

Accession numbers and locations may appear on a catalog card. Accession numbers are in the left hand margin, several lines below the call number (or on the last continuation card if there are many accession numbers for a title). A volume number and/or a location may be associated with each accession number. Also, a location stamp may appear above the call number. An "Also in ..." stamp may also be included below the call number.

The 049 field should be input following the guidelines in AMIGOS Memorandum 75-13 (dated August 5, 1975), which consists mainly of "Definition and Use of the 049 Holding Field," probably originating at OCLC. The 590 local notes field is used so that accession numbers and special locations are printed on OCLC cards. The 590 fields would be needed in the conversion in order to maintain consistency with TAMUL's other OCLC-MARC records and to provide the special location data for future applications within the Library.

Texas A&M University Library presently has twelve holding libraries. The holding library symbol for \$a of the 049 field is determined by the location stamp on the card, either above the call number or associated with the accession number. If no specific location is present, the main holding library symbol is used. Some of the holding locations on cards to be converted are no longer used and would default to the main holding library. Certain specialized collections are grouped into a single holding library in OCLC. Certain types of material, such as dissertations, have their own holding library.

Occasionally, an input stamp is required for printing above the call number certain locations within the main holding library. A second input stamp is used for "Also in ..." notes which appear below the call number. When an item is in one of the special collections, as well as some other holding library, a second input stamp is used to obtain "Also in SpColl" below the call number (see Example 4 of Figure 1 in the Appendix).

Copy numbers and volume subdivisions are used, following the AMIGOS guidelines for \$c, \$v, etc. Accession numbers are recorded following the subdivision to which they apply.

Accession numbers and certain location stamps are input in a 590 field. Notes pertaining to missing copies, withdrawn copies, etc., would also be entered with the associated accession number in the 590.

Detailed specifications and tables for mapping the holding information on a shelflist card to current usage of 049 and 590 fields would be provided by the time our conversion began. Representative examples are included in Figure 1 of the Appendix.

Call Number Decimal Placement

In many call numbers in the shelflist, the placement of the decimal point is non-standard. Input of all call numbers should follow Library of Congress standard format. See Figure 2 in the Appendix for examples.

Adapted LC Copy

The TAMU Library tries to find LC copy for all of its cataloging. In some instances, LC copy for a similar work was adapted for cataloging the piece in hand, for example, a different edition or a translation of the work of the LC copy. Such cataloging is identifiable by the LC card number in the lower right hand corner of the card marked with an "x", as 66-81142x. Whenever the LC card number so marked with an "x" appears, that LC card number is not the LC card number of the cataloged piece. It appears on the card only to indicate the source of cataloging data. Such items would represent "new" records on OCLC, unless the specific edition has already been entered. Figure 3 in the Appendix illustrates this use of the LC card number.

Non-Roman Alphabets

Information written in non-Roman alphabets must be transliterated according to the Romanization tables used by the Library of Congress.

Dewey Reclassification

Before 1968, the Library's collection was cataloged with Dewey classification numbers. This portion of the shelflist may be retrospectively converted on OCLC with the rest of the shelflist. The final decision to include the Dewey shelflist or not will be made after a study of alternative reclassification procedures, needs for the data in applications using the machine readable shelflist, timing of availability of the data, and costs.

If the Dewey shelflist is included, when a record is found in the On-Line Union Catalog for a Dewey shelflist item, the LC call number should be included in our record, along with the Dewey number from the shelflist card.

Cards produced by the Library of Congress account for about 90-95% of the cards in the Dewey shelflist. However, in some cases these cards were altered to catalog similar works, for example, a different edition, publication by a different publisher, or a change in pagination. Occasionally, several editions are listed on the same card. Several examples appear in Figure 4 of the Appendix. The LC card number on such cards would not be valid. Such LC card numbers are not marked. The cards involved are

identifiable only by recognizing typed-in changes or crossed-out data. About 6% of the Dewey shelflist entries present such problems.

Typed cards constitute about 7-8% of the Dewey shelflist. The source of cataloging data on these cards is unknown.

Dewey shelflist entries are currently being reclassified to LC numbers under a special authorization number on OCLC. According to monthly OCLC statistics, the rate of reclassification is about 500-600 entries per month. This would slightly affect the total number of entries when TAMUL's retrospective conversion began.

Microfilming

The entire shelflist, excluding OCLC-produced cards and possibly Dewey cards, would be microfilmed for use by the conversion team. Special care may have to be taken to get all data from the back of cards, when it appears.

III. COLLECTION AND CATALOGING TRENDS

Most of the growth of the Library's collection has occurred since 1968, coincident with a period of rapid growth within the university as a whole.

Over half of the collection is relatively new. There are few 19th Century works. Before 1968, the collection was oriented to the scientific, agricultural, and engineering curricula of the university. After 1968, the Library began acquiring more works in the areas covered by the humanities and the social sciences to fill the needs of new educational programs. The use of LC classification numbers began in 1968, and the LC shelflist was begun. Its size in relation to the Dewey shelflist is evidence of the rapid growth of the collection in the last ten years.

Not much of the collection is in foreign languages. There is very little in non-Roman alphabets. Non-Roman data would need to be transliterated, as noted earlier.

TAMU Library searches for LC copy for its cataloging. It has been estimated that about 60% of the cataloging in the LC shelflist is from LC copy. Often LC copy is adapted for cataloging similar works, for instance, a different edition. Counting these entries, about 90% of the cataloging would be LC copy or be derived from LC copy.

The Library's participation in the OCLC network began in November 1975. About 75,000 new entries have been made to the shelflist using OCLC. Of course, these are not being included in the shelflist conversion. Serials cataloging on OCLC began only recently when OCLC began producing serials cards. It is estimated that the shelflist contains about 30,000 serials entries: about 16,000 of these are open subscriptions.

IV. SEARCHING EXPERIENCE

Two months worth of data on matches found using various searching tools is available from the Search Department. Data pertaining to searches done on OCLC is summarized below.

Table 2. Matching data for pre-cataloging searches for monographs on OCLC terminal by the Search Department

Type of match found	Percentage of all OCLC searches	
	December 1977	January 1978
LC/CIP	68.97%	78.80%
Not Exact Copy	19.27	11.78
Co-op	6.90	3.40
No Record Found	4.87	6.02

"LC/CIP" are exact matches with LC records or member records input from LC copy. These records are used without further verification.

"Not Exact Copy" matches are records which are adaptable for cataloging the piece in hand. The records are also LC records or member records input using LC copy. However, the piece may be a different edition, published by a different publisher, etc. "New" records would be input for the piece, using much of the data which was found for the similar work.

"Co-op" matches are level 'I' records which represent original cataloging by an OCLC participant. Data is checked against the book, LC subject heading list and the public catalog before the record is used for catalog production.

"No Record Found" items are processed by the original catalogers for input into the OCLC On-Line Union Catalog.

The items searched include all types of materials acquired by the Library and processed by the Cataloging Department, with the exception of theses and dissertations. Unfortunately, this data is available only for the mix of materials currently being acquired, and only for two recent months which are normally low-volume months.

APPENDIX. Examples for special handling of data on shelflist cards

Figure 1. Holdings and location data in 049 and 590 fields

Figure 2. Non-standard placement of the decimal in an LC call number

Figure 3. Adapted LC copy with marked LC card number

Figure 4. Altered Library of Congress cards in the Dewey shelflist

Figure 1. Holdings and location data in 049 and 590 fields

Example 1.

Sci. & Tech.	
QL	
553	Brown, Frederick Martin, 1903-
B7.35	Jamaica and its butterflies, by, F. Martin Brown and Bernard Heineman; illustrated by Marjorie Starham Favreau. London, E. W. Clacey Ltd, 1972.
1128973	1 v., 478, 24 p. illus. (chiefly col.), maps. 28 cm. Index. \$10.50
	Bibliography: p. 433-460.
	I. Butterflies--Jamaica. I. Heineman, Bernard, joint author.
	II. Title.
	QL553.B735
	ISBN 0-9048-44-8
	Library of Congress
	503.769197252 72-1128973
	JUN 7 1973 MAR

049 TXAM \$c [1128973]
 590 1128973

Example 2.

Popper, Karl Raimund, 1902-	
	The open society and its enemies, by K. R. Popper ...
	London, G. Routledge & K. Paul, 1945.
	2 v. 221 cm.
	"First published 1945."
	Bibliographical references included in "Notes" at end of each volume.
	CONTENTS.—I. The spell of Plato.—II. The high tide of prophecy: Hegel, Marx, and the aftermath.
	1. Philosophy. 2. Social sciences. I. Title.
	187386 391 46 913
	Library of Congress 187387

049 [Templeton] TXAM \$v 1 [187386] \$v 2 [187387]
 590 187386,1 187387,2

Figure 1. (continued) Holdings and location data ...

Example 3.

SF 375 K3.37	Kendall, George Wilkins. 1860-1867. Letters from a Texas sheep ranch, written in the years 1860 and 1867, by George Wilkins Kendall to Henry Stephens Randall. Edited by Harry James Brown. Ur- bana, University of Illinois Press, 1969. 156 p. 24 cm.
305-110 381807	TEXAS COLL Dykes
1. Sheep—Texas. 2. Ranch life. 3. Brown, Harry James, ed. 4. Randall, Henry Stephens, 1811-1870. 5. Title.	
SF375.K337	630.80818 58-18189 :
Library of Congress	2, MAR 15 1969

049 TXAS \$c 1 [305419], 2 [381807]
590 305419, Texas 381807, Dykes

Example 4.

F 389 F3	Faulk, Odie B. The last years of Spanish Texas, 1773-1821, by Odie B. Faulk. The Hague, Mouton, 1964. 150 p. 23 cm. (Studies in American history, 4)
458121 422842	SOC. SCI TEXAS
1. Texas—Hist.—To 1900. 2. Title. (Series)	
F389.F3	65-4231
Library of Congress	MAR 13 69

049 TXAM [Also in][SpColl] \$c 1 [458121] \$a TXAS \$c 2 [422842]
590 458121 422842, Texas

Figure 2. Non-standard placement of the decimal in an LC call number

Example 1.

HUM. & SOC. SCI.	
PR	
2976	Carnegie Institute of Technology, Pittsburgh. Dept. of English.
C3.28	
1972	"Lovers meeting": discussions of five plays by Shakespeare. Freeport, N. Y.: Books for Libraries Press, 1972. c1964.
1161561	Q p. 22 cm. (Hany index reprint series) Original ed. issued as no. 8 of the Carnegie series in English. CONTENTS: Foreword, by A. Wright.—Love's labours lost, by D. M. Masselbauer.—Romeo and Juliet, by J. A. Hart.—Twelfth night, by A. F. Schuchoff.—A Midsummer Night's Dream, by A. L. Hayes.—The winter's tale, by H. W. Cottrell. I. Shakespeare, William, 1564-1616—Criticism and interpretation. I. Title. II. Series: Carnegie series in English, no. 8. PR2976.C328 1972 H22.373 72-1335 ISBN 0-8389-2581-0 MARC Library of Congress JUL 21 1973

050 0 PR2976 \$b .C328 1972

Example 2.

TL	
686	Kuter, Laurence S.
B6.5	The great gamble: the Boeing 747; the Boeing-Pan AM Project to develop, produce, and introduce the 747, by Laurence S. Kuter. University, University of Alabama Press, 1973.
K8.7	
717102	ix, 134 p. 21 cm. \$8.50 SOC. & TECH.
	I. Boeing 747 (Jet transports) I. Title. TL686.B65.K87 387.733740 73-57 ISBN 0-8173-2712-6 SEP 1 1973 MARC Library of Congress

050 0 TL686.B65 \$b .K87

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Figure 3. Adapted LC copy with marked LC card number

SPECIAL COLLECTIONS	
PC	
4	Schlunke, E O
S3.49	Stories of the Riverina. Selected with an
St 2	introd. by Clement Semmler. [Sydney] Angus and Robertson [c1966]
	198 p.
1092076 DYNES CAME	
I. Title.	
PZ4.S349St 2	W 66-81142x
JAN 22 '73	

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Figure 4. Altered Library of Congress cards in the Dewey shelflist

Example 1. Date of publication changed

620.00022 Mead, Daniel Webster, 1862-1948.
 M479c Contracts, specifications and engineering relations, by
 1933 Daniel W. Mead ... with chapter on contracts, by Frank
 Jenks ... 2d ed. New York, McGraw Hill book co., 1933.
 xl, 557 p. diagrs. 23 cm.
 "Literature" at end of most of the chapters; "Bibliography of speci-
 fications": p. 485-535.

~~269816, p. 2~~ ~~Frank Jenks~~
 1. Engineering - Contracts and specifications. 2. Engineering Law—
 U. S. — I. Jenks, Frank. 20--15051
 Library of Congress TA190.M1 1920 JAN 3 1957
 (5011)

Example 2. Publisher changed

620 Vocabulary of mechanics in five languages: English/Ger-
 V071 man/French/Polish/Russian. New York, Macmillan
 1.480 (1962—
 v. illus. 25 cm.
 Vol. 2 has imprint: Oxford, New York, Pergamon Press.
 CONTENTS. — v. 1, Group 05, theoretical mechanics; group 10,
 741.84,1 strength of materials.—v. 2, Group 15, mechanics of fluids, edited by
 A. T. Troskolan'ski.
 1. Mechanics—Dictionaries—Polyglot. 2. Mechanics, Applied—
 Dictionaries—Polyglot. 3. Dictionaries, Polyglot. I. Troskolan'ski,
 Adam Tadeusz, ed.
 TA349.5.V6 620 62--11559
 Library of Congress V373
 (6797p3)

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Figure 4. (continued) Altered Library of Congress cards ...

Example 3. Data changed for different edition

620	Antill, James M	
AC22.c	Civil engineering construction, by James M. Antill and	
1965	Paul W. S. Ryan. Sydney, Angus and Robertson, 1957.	
	1965. 110 p. illus. 23 cm.	
	2d edition (revised)	
487317	Engineering	
	1. Civil engineering.	2. Ryan, Paul W. S., joint author. ~~487317~~
TA143.A54	620	58-28363 1
Library of Congress	Ab21c d1165	NOV 15 1966

Example 4. Two editions on one card (both have been reclassified, as shown by deleted accession numbers)

620.07		
S61343		
	Simpson, Laurence Packer, 1895-	
	Law for engineers and architects, by Laurence P. Simpson	
	... and Essel R. Dillavon ... 3d ed., by Laurence P. Simpson.	
	St. Paul, Minn., West publishing co., 1946.	
	~~1. 3d ed.~~	
	~~96410, 1st ed.~~	
	1. Law—U. S.—Compends. 2. Architects—U. S.—Legal status, laws, etc. 3. Engineering law—U. S. 4. Dillavon, Essel Ray, 1893—joint author. 5. Title.	
	46-22552	
	Library of Congress	

Figure 4. (continued) Altered Library of Congress cards ...

Example 5. Two editions on one card

61.3 2 Arcs, Stanley William.
 3525' Television engineering: principles and prac-
 tice, by S. W. Arcs and D. C. Birkinshaw, in
 collaboration with A. L. Bliss. London, 1956
 2 v. illus. (51 on engineering training
 manuals)
 374763,1,1957
 374764,2,1958
 374765,3,1957
 374766,4,1951. Television.

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UNIVERSITY OF CALIFORNIA SYSTEMWIDE ADMINISTRATION

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OFFICE OF THE ACADEMIC VICE PRESIDENT
DIVISION OF LIBRARY AUTOMATION

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University of California Retrospective Conversion Key Concerns Stephen L. Sorensen, Associate Librarian for Conversion

The University of California Division of Library Automation is currently involved in the funding of eight conversion projects at five UC campuses. Each project submits proposals, reports, statistics, etc. to the Systemwide Division of Library Automation. The projects in progress are:

- UC-Berkeley-Institute of Transportation Studies Library; Mike Kleiber, Manager
- UC-Berkeley-Law Library (Boalt Hall); Kent Schrieffer & Linnea Christiani, Managers.
- UC-Davis-Health Sciences Library; David Anderson, Manager.
- UC-Davis-Law Library; Cecilia Kwan, Manager.
- UC-Davis-Main Library; Diana Gray, Manager.
- UC-Irvine-Main Library; Tom Birrell, Manager.
- UC-Riverside-Main Library; Judy Ganson, Manager.
- UC-San Diego-3 (three) libraries; Susan Rhee, Manager.

These libraries represent a mixture of general, law, science, engineering, transportation, and biomedical collections. Each project has concerns unique to its particular situation, but there are some general key concerns that have become clear during the time that the projects have been in progress (14 months for some).

Reclassification projects, once commonly done, are now almost always done as a sub-project of a retrospective conversion project. Reasons: For the effort required, it is felt that conversion takes little more effort than reclassification alone, and accomplishes a great deal more for any collection, since the advantages of having machine-readable data are well known.

Retrospective conversion inevitably brings up the problem of recataloging. Recataloging is often performed as part of a recon project. Reasons: Non-standard records are always discovered in the course of conversion. Decisions have to be made whether to do partial recat, full recat, or no recat (rare). These decisions are often delayed until it is seen to be necessary to make them. In other words, they should be made before recon starts.

Decisions must also be made concerning level of conversion to be done: full level or partial level. Full conversion, is, of course, creating a complete machine record with all fields, subfields and delimiters coded, and with the fixed field completely coded. With some records, this often means that the work must be in hand. Within this level, decisions must be made as to whether the record will be copied (input) as is, if not AACR or ISBD, or changed to these conventions. Partial level conversion means that all fields may not be coded, only ones essential to the system used, and that not all the fixed field may be coded, except for values required by the system. Partial-level conversion should be discouraged, as the clean-up work required later will end up costing more than the money saved by inputting brief records during the project.

Recon projects are often performed "on demand"--that is, a work is converted if it circulates. In this type of project, recat or reclass are sometimes, but rarely, part of the process. This is done also because there may be a lack of funds for a full conversion project.

The greatest problem in a conversion project is start-up. What does this involve? Systems vs. non-systems people. New hardware. Obtaining hardware and materials. Familiarizing workers with new techniques. Injection, and, later, integration of new procedures into established workflow. Establishing new workflow and procedures. How to handle problems. Besides workflow problems, there are always problems on a record-by-record basis. Procedures must be established to handle these record problems, whom they should be referred to, if necessary, etc.

All personnel must learn the relationship of the card record to the machine-readable record, not just those in charge of the project.

How to process the created machine-readable file, COM products, on-line systems, printed catalogs, etc. What products are desired? Are future needs foreseen?

Input methods must be taught. This involves searching, coding, card photocopy, etc. Creating a new machine-readable record, modifying an existing on-line record. Verifying the newly-input records. What type of revising will be done? Training the new personnel is an extremely important part of the project. Are they to be temporary or permanent? Most important, it must be decided what level of personnel is to perform various levels of the project tasks. It takes six months to train conversion project workers thoroughly and to have them at full production. This is an investment of a lot of time and money. Sometimes, well trained staff will leave a project because of the often temporary nature of the work assignment. This unsteady staff situation is a dilemma often faced in recon projects.

Each project will have to make its own decisions, but these general concerns will affect all projects.

DRAFT

Joint Documents
University of California
Systemwide Administration

UNIVERSITY OF CALIFORNIA DIVISION OF LIBRARY AUTOMATION

RETROSPECTIVE CONVERSION PLAN FOR THE UNIVERSITY OF CALIFORNIA

1.0 INTRODUCTION

Retrospective conversion is the process of converting hard copy catalog records to machine-readable form. Retrospective conversion is an important part of the University's library Plan¹, and is necessary to improve access to the library resources of the University. The Plan directs that conversion of the approximately 1.8 million catalog cards produced by the University since 1973 be completed by the end of fiscal year 1981/1982.

Preliminary work on retrospective conversion is already under way.

The Division of Library Automation (DLA) receives one copy of each catalog card produced at eight of the nine campuses, with the exception of cards produced by a technical processing system, *Other catalog records are received as microfiche on computer tape.* DLA has completed two studies on the approximately 1.2 million cards received as of June 1976. These studies form the background for the current plans for retrospective conversion. In addition, a number of conversion projects are *in progress,* including an in-house project to convert catalog cards based on LC MARC, as well as six campus conversion projects.

¹ ^{2 pp} California University Office of the Executive Director of Universitywide Library Planning. ^{2 pp} The University of California Libraries; a plan for development. ^{4 pp} Berkeley, California, Office of the Executive Director of Universitywide Library Planning, 1977. 210 p.

This report presents a plan and supporting documentation for UC conversion efforts. The conversion plan provides for conversion of UC cataloging (-1973-to-date-) through three mechanisms:

- A DLA conversion project to attach campus call numbers and holding locations to LC MARC records (MARC Conversion Project).
- An OCLC conversion project to contract with OCLC Inc., to convert UC records through the OCLC Technical Processing System, at Columbus, Ohio.
- Campus Conversion projects in which campus staff convert local cataloging records on cards through a technical processing system.

Estimated funding for conversion was specified in the Plan for Development. As outlined in Table 1 below, funding was allocated on a year-by-year basis until 1981/82, when it is expected that planned ^{intended} conversion will be completed. Funding projections were based on a number of factors, including the campus use of a technical processing system, technical processing system policies for conversion, the characteristics of the records to be converted and estimated labor costs. As with all projections, the reality of the situation is often quite different. ^{It is to make realistic revisions in estimated funding,} This plan identifies two areas which may require more funds than projected. ^{in the Plan for Development.} First, campus conversion projects are showing a higher-than-expected cost and are converting records produced before 1973. Second, a number of campus projects extend beyond 1981/82, after which date no conversion funding was included in the Plan. It is too early to know if the projected funds are sufficient, as there may be offsetting economies in other areas of conversion. ^{conversion} This plan sets into motion a monitoring task ^{that} which will supply the needed ^{Required} data to revise the ^{estimates of} funding for conversion.

TABLE 1

Funding for Retrospective Conversion
(in thousands)

	1977/78	1978/79	1979/80	1980/81	1981/82
(In thousands)	75 ²	575 ³	790	790	468

¹ From Table 13 in an earlier draft of the Plan for Development; copies of tables attached as appendix

² Utilized for card study, MARC card conversion

³ -?- utilized for MARC card conversion, campus conversion projects, planning for OCLC conversion.

The Plan for Conversion is divided into the following ^{Seven} sections:

2.0 Goals for retrospective conversion.

3.0 Quality considerations for retrospective conversion.

4.0 Timetable for conversion.

5.0 Funding for conversion.

6.0 Scope of conversion.

7.0 Conversion strategies.

8.0 Task planning for conversion.

2.0 GOALS FOR RETROSPECTIVE CONVERSION

The goals for retrospective conversion are:

2.1 Convert UC catalog card records to machine-readable form using the MARC format as specified in Books: A MARC format, and its addenda.

2.2 Make converted records in the MARC communications format available for Universitywide access products such as the Union Catalog, the online catalog, and various campus products.

2.3 ^{E.} Insure that converted records meet established national standards for bibliographic content, format and content designation.

2.4 ^{E.} Insure that converted records accurately reflect the campus source records.

2.5 Convert records at the lowest cost to the University.

2.6 Convert UC cataloging from 1973 to date into machine-readable form by the end of fiscal year 1981/82.

Achievement of these goals will require the cooperation of Systemwide and campus groups to establish standards, coordinate conversion projects, and edit records. The result of these efforts will be a comprehensive and high-quality data base for improving access to the collections of the Libraries of the University of California.

3.0 QUALITY CONSIDERATIONS FOR RETROSPECTIVE CONVERSION

^{resulting} Records from retrospective conversion will become an integral part of the Union Catalog data base and must meet the same standards as current cataloging. Four steps are being taken to ^einsure the quality of retrospectively converted records. First, as part of the data base building process for the Union Catalog, retrospective records will be matched with LC MARC records. ^{that} Records which match LC MARC bibliographic records will be linked to the most current LC MARC record and will be capable of being upgraded automatically as LC upgrades the LC MARC bibliographic file.

Second, as part of the Union Catalog data base system, headings from retrospective records will be subject to authority control. Headings will be linked to LC MARC authority headings, headings in LC MARC records, and to other campus headings. Headings not matching existing headings or references will eventually be manually reviewed and established as necessary.

Third, to aid in coordinating the input of retrospective records, guidelines have been prepared and will be implemented by each participant (Appendix One). These guidelines ^{emphasize} reinforce the need to follow national standards (AACR, ISBD, and MARC) and the standards required by the technical processing system chosen by the ^{participating} campus participant. In addition, converted records will be reviewed and edited as necessary.

Fourth, studies will be undertaken and procedures implemented ^{in order} accurately to record significant ^{changes} made to existing retrospective records after the record have been submitted to the Union Catalog. The catalog is not a static tool, and records are continually being updated. Unless techniques are developed to add changes to retrospective records, the Union Catalog data base will be out of ^{date compared to} synchronization with the campus files.

Preliminary analysis seems to indicate that the majority of the significant changes to Union Catalog records will be recorded in the Union Catalog data base. The major category of changes to previously-cataloged records are changes to headings (author, series, and subject) necessitated by changes made by the Library of Congress. These changes will be ^{will} eventually be recorded as the converted records and their headings are matched against the LC MARC bibliographic and authority records. LC MARC records exist for between 50% to 60% of the

records to be converted. LC MARC records authority headings will match even a larger percentage once LC completes its retrospective authority project.

Other changes made to records, once the cards are received by the Union Catalog, included modifications of the bibliographic description and changes in the call number and locations. Preliminary study seems to indicate that the majority of the changes of the description are minor and do not adversely affect the future uses of the record.

Changes in the call number and locations, however, are a more serious problem. Changes in call number or locations ^{that} which are not reflected in the Union Catalog are likely to impair seriously the ability of a user to find a title. ^{work.} A study of campus procedures must be undertaken to determine ^{if?} ^{how} ~~there is~~ change information available in campus files which ^{could} be used to update the Union Catalog.

Of course, the ultimate answer to the problem of campus changes is to get all retrospective records into a technical processing system and the Union Catalog so that all future changes can be made online.

4.0 TIMETABLE FOR RETROSPECTIVE CONVERSION ?

The Plan for Development calls for the initial installation of the online catalog in 1982/83. It was intended that by this date all cataloging in the Roman alphabet would be in machine-readable form. Figure 1 outlines the timetable for conversion. Plans for conversion of cataloging performed before 1973, of non-monograph formats and of nonroman alphabets ^{scripts (or)} ^{books} have not been developed.

FIGURE 1

Timetable for Conversion

	<u>1977/78</u>	<u>1978/79</u>	<u>1979/80</u>	<u>1980/81</u>	<u>1981/82</u>	<u>1982/83</u>	<u>1983/84</u>	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
MARC Card Conversion	-----										
Campus Conversion	(274,838)										
OCLC Conversion	-----										
Nonroman Conversion	----- ? -----										

D
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TABLE 2

Retrospective Conversion: Statistical Overview and Projection

(1973 +)	1979	1980	1981	1982
Number of records to be converted by July 1	1,420,000 ¹	1,259,975	882,633	429,977
Records (1973 +) converted in FY				
MARC card projects	200,025 ²	113,000	-----	-----
Campus project	0 ³	51,982	32,926	15,241
OCLC project	<u>0</u>	<u>212,365</u>	<u>424,730</u>	<u>414,736</u>
TOTAL	200,025	377,347	457,656	429,977
Records received in FY for conversion	40,000	5K	5K	
Records to be converted by June 30th	1,259,975	882,633	429,977	- 0 -
Earlier-than-1973 records converted		77,033	24,658	1,790

¹All cards as of July 1, 1979 (Nonroman and non-monographs excluded)

²(All converted 1977 - July 1978)

³A small number of cards (approximately 1000) converted in 78/79. These have been added to 79/80.

5.0 FUNDING FOR RETROSPECTIVE CONVERSION

Funding for retrospective conversion is a component of the funding for the development and implementation of the online catalog as outlined in Table 36 on page 202 of the Plan. The funds proposed in the Plan, augmented for price increases and inflation, become the budget for the online catalog, including retrospective conversion. Table 2 of this report summarizes projected record throughput and funding requirements for retrospective conversion at the time of this report.

Yearly funding breakdowns were derived from a draft of Table 13 which was included in earlier drafts of the Plan.

Analysis of Table 2 (derived from the previous Table 13) indicates two potential problems.

1. Continued funding of campus projects ^{that} which do not convert 1973-to-date materials, or which ^{that} convert materials at a high per/record cost, may prevent achievement of the goals outlined in the Plan to have 1973-to-date materials in the online catalog. These projects will compete for funds with the OCLC conversion project.
2. A number of campus projects are planned to continue beyond 1982/83. Funds, however, have not been set aside after 1982/83. Thus, funds for the continuation of these projects must be requested as amendments to the Plan or found in other areas of the online catalog development.

TABLE 3

Categories of Cards to be Converted¹

Roman Alphabet

Monographs

MARC	(24.5%) ²	347,900		
------	----------------------	---------	--	--

LC Non-MARC	(34.7%)	492,740		
-------------	---------	---------	--	--

Original	(33.2%)	471,440		
----------	---------	---------	--	--

Computer Print	(7.0%)	99,400		
----------------	---------	--------	--	--

<i>Other</i>	<i>(0.6%)</i>			
--------------	---------------	--	--	--

TOTAL Roman	1,420,000
-------------	-----------

Nonroman	(11.25%)			
----------	----------	--	--	--

TOTAL Nonroman	180,000
----------------	---------

TOTAL Monographs	1,600,000
------------------	-----------

Non-monographs	(11.11%)	200,000		
----------------	----------	---------	--	--

TOTAL Non-monographs	200,000
----------------------	---------

TOTAL CARDS	1,800,000
-------------	-----------

¹ From Katharina Klemperer, and Bruce D'Ambrosio, *University of California Union Catalog: Conversion of catalog cards to machine-readable form, Phase I: Bibliographic characteristics of University of California cataloging, Berkeley, Systemwide Bibliographic Projects, ULAP, 1978.*

² This represents catalog cards that bear the legend "MARC." MARC records exist also in other categories as follows:

Original	(23.4%)	110,316
----------	---------	---------

Computer Print	(83.8%)	83,297
----------------	---------	--------

6.0 SCOPE OF RETROSPECTIVE CONVERSION^e

The planned conversion outlined in this report takes into consideration *only* a subset of the total catalog records available for conversion. Records have been selected ^{for} conversion based on a number of factors, including the year in which they were cataloged, the ^{script (or)} alphabet of the record, and the form of material being cataloged. These categories are summarized in Table 3 and described in more detail below:

6.1 Year of cataloging

University of California card catalogs contain approximately 16-17 million ^{titles} (January 1980) 14,600,000 titles (June 30, 1976)². The initial conversion efforts, however, are directed at materials cataloged since 1973. Three reasons for beginning with 1973 are:

- 6.1.1 Conversion of records dating from 1973 to the present will provide a coherent data base of records covering 10 years by the time the online catalog becomes available for public access. With this span of coverage a library user could reasonably begin a search using the online catalog rather than consulting one or more manual files.
- 6.1.2 The existence of a high-quality data base consistent with national standards will make it easier for UC libraries to close their catalogs and to begin using a new catalog based on AACR2. It is not expected that all UC libraries will

close their catalogs in unison; nevertheless, the existence of a consistent data base could facilitate the transition to a new catalog.

6.1.3 The submission of catalog cards to the Union Catalog Project favors a 1973 starting date for conversion. Catalog cards have been sent to DLA on a quinquennial basis. Cards from 1973 were ^{have been} collected through (?) ¹⁹⁷⁶ and continue to be received at DLA. Because these cards represent a clear starting date for all campuses, it is reasonable to begin conversion with the current ^{available} 1973-to-date materials.

6.2 Type of catalog card

The catalog cards received since 1973 total approximately 1.8 million. As libraries have joined a technical processing system, the number of cards needing conversion has dropped off dramatically. For the purposes of conversion, the 1.8 million cards can be broken down into a number of categories, depending on ^{script (or)} alphabet, format, and availability of machine-readable copy. In some cases, as noted below, the priority of conversion and the conversion strategy are dependent on the category of the card. The characteristics of the cards have been studied in detail¹ and only a brief categorization is presented here.

¹ California University Office of the Executive Director of Universitywide Library Planning. The University of California Libraries; a plan for development. Berkeley, California, Office of the Executive Director of Universitywide Library Planning, 1977. 210 p.

1. California University Office of the Executive Director of Universitywide Library Planning. Op.cit. -13-
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6.2.1 Type of alphabet

Catalog cards in the Roman alphabet including transliterated nonroman cards are to be converted before nonroman materials. Nonroman cards included a wide range of languages and alphabets. ^{Sc-1043 (C)}

6.2.2 Monographs

The majority of the catalog cards received by the Union Catalog Project represent monographs. Monographs are a logical choice for early conversion due to their large number and the existence of many monograph records already in machine-readable form. Monographs can be further divided into:

6.2.2.1 Catalog cards ^{corresponding to} represented by LC MARC records, ^{on tape.} These cards, identified by the appearance of the legend "MARC" in the lower right corner of the card, are being converted in-house by DLA. (See section 7.1)

6.2.2.2 Catalog cards based on Library of Congress cataloging, ^{but} These cards are identified as being copies of Library of ^{not on} LC MARC ^{tape.} Congress catalog cards without the legend "MARC". These cards will be converted by OCLC ^{in a similar manner} and campus conversion projects ^{by} as noted below in sections 7.2 and 7.3.

6.2.2.3 ^{Typed} Original² cataloging cards. These cards are identified as being locally typed. ^{Some of these} Original cards may represent also

on non-MARC
retyped LC MARC and LC cataloging copy? These cards will be
converted by OCLC ^{or another vendor} and through campus projects.

6.2.2.4 Computer-produced catalog cards. These cards ^{are identified} as
^{printed type} identified by ^{having been} having type fonts indicative of computer printing. ^{reletat} ^{output}

Computer print cards come from a number of sources, including
BibCenter, Blackwell North America, and Jostens. Conversion
of these cards will depend on the source, and whether the original
machine-readable records are available through an on-line system.

6.2.3 Non-monograph cards

These card records include a wide variety of bibliographic
formats, including serials, maps, music, sound recordings,
etc.

6.3 Campus Collections

Important campus collections are candidates for retrospective
conversion because of their anticipated value for the online catalog.
These collections are primarily monographs. Their dates of coverage
may fall before the 1973 starting date. Conversion is handled on
a collection-by-collection basis through a technical processing system
as described below in section 7.3.

-15-

D R A F T

7.0 CONVERSION^e STRATEGIES

In order to meet the goals for quality, cost and timeliness, a number of conversion strategies have been identified. These strategies attempt to ^{adjust} tailor conversion to particular categories of catalog cards. In this way, cards can be batched for input using the optimum ^{option for each category} strategy. The three strategies (MARC card conversion, OCLC ^{or other vendor} input, and campus input) are introduced below. Project plans for each strategy are under development.

7.1 MARC card conversion

The MARC card conversion project, now under way, adds campus call number and holding locations to LC MARC records. In this process, campus catalog cards with the legend "MARC" and no visible typographical changes to the campus card are separated from the 1.8 million campus catalog cards. Approximately 395,000 of the 1.8 million are included in this category. Keyers enter the following elements into the DLA mini-computer: the Library of Congress card number (LCCN), the campus call number, and locations, the Library of Congress classification number, and a control number. These short records are then printed out for sight verification. Once verified, the short records are passed against the LC MARC data base using the LCCN as a search element and the corresponding LC MARC records are retrieved. Retrieved records are then programmatically compared ^{the} on Library of Congress classification number. When records match, campus call number and locations are added to the LC MARC record and the record is moved to the Union Catalog data base. Records ^{which} do not match on LC Classification Number are reviewed manually. Table 4 summarizes the statistics for MARC card conversion performed for the Pilot Union Catalog.

TABLE 4

MARC Card Conversion Statistics

1)	Converted Records			
1.1	Converted records in UCDB			
1.1.1	Processed for UCDB	77,270		
1.1.2	Rejected	3,889		
	TOTAL	81,139		
1.2	Processed for UCDB but not added (pre-1976 imprints)			
		17,883		
1.3	Number of records converted in old format			
		119,590		
	TOTAL	218,612		
2)	Records to be Converted			
2.1	Number of records ready to be keyed			
		77,132		
2.2	Number of records to be numbered			
		17,868		
	TOTAL	95,000		
3)	Production Statistics			
3.1	Work flow	3.1.2	Elapsed Times	
3.1.1.1	Input rate per/FTE/hr. 60	3.1.2.1	Input	1,583
3.1.1.2	Verification rate per FTE/hr. 100	3.1.2.3	Verification	950
3.1.1.3	Numbering rate per/FTE/hr. 1,286	3.1.2.3	Numbering	<u>60</u>
		TOTAL ELAPSED HOURS 2,593		
3.2	Staff			
3.2.1	Assistant Key Entry Operators (FTE for 4.6 mos. (2593 hrs.) @ 4.51/hr.)			11,694
3.2.2	Bibliographic Assistant II (4.6 mos. (2593 hrs.) @ \$1120 per month)			5,152
3.2.3	Associate Librarian (@ 33% for 4.6 mos.)			<u>2,518</u>
	(All plus 13%)	TOTAL	17,003 or .18 record \$19,364 or .20 per record.	

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7.2 ^{on other vendor} OCLC conversion project

As a second strategy,

^ The University is in the process of negotiating with OCLC, Inc., ^{and other vendors} to convert a substantial portion of the catalog cards (1 million of the 1.6 million Roman alphabet cards) submitted to the Union Catalog Project since 1973. OCLC ^{may be} was chosen as a ^{possible} conversion mechanism for 5 reasons:

- 7.2.1 The OCLC data base ^{is essential to} contains machine-readable records for approximately 80% of the campus catalog cards for monographs submitted to the Union Catalog Project since 1973¹.
- 7.2.2 Procedures and programs have already been established to handle OCLC input and archive tapes.
- 7.2.3 The degree of correspondence between campus catalog cards and machine-readable records in OCLC is ^{notably} equivalent to other systems². While the degree of match does not necessarily indicate quality, it does show that OCLC records are as "usable" as other systems.
- 7.2.4 The low cost of \$.756 to \$1.40 (proposed) to convert a record compares favorably with other alternatives.

¹ California University Office of the Executive Director of Universitywide Library Planning. The University of California Libraries; a plan for development. Berkeley, California, Office at the Executive Director of Universitywide Library Planning, 1977. 210 p.

7.2.5 Conversion through OCLC^{probably} would have ^a minimal impact on Systemwide and campus staff, thus reducing the administrative overhead of the overall conversion projects.

For the OCLC^{on other vendor} project, catalog cards will be sorted at DLA, packaged campus-by-campus and sent to OCLC^{on other vendor}. These records will then be converted on a campus-by-campus basis using campus-specific conversion profiles. Converted records will be added^{by OCLC or another vendor} to the OCLC on-line data base and to the archive tapes. DLA will review OCLC^{on vendor}-converted records, participate in training of OCLC^{on vendor} operators, and coordinate campus involvement in the project. Once reviewed, converted records will be added to the Union Catalog data base.

7.3 Campus conversion projects

The University is supporting a number of campus retrospective conversion projects. These projects have been chosen because they will convert into machine-readable form ^{many integrated} coherent and important collections, such as those for law and undergraduate libraries. ^{where the coherence of the ~~file~~ collection as a whole must be preserved as well as the identity of individual items within specific collections.} Figure 5 outlines campus projects funded as of July 1979. In the majority of the projects, campus libraries are converting records from their local files, ^{for the sake of coherence,} and these files may contain records created before the 1973 starting date. Campus projects are using both the OCLC and RLIN technical processing systems. Once records are entered into the respective on-line system, the titles will be available on-line in the same way as the ^{also del} current cataloging, and will ^{complete} output on archive tapes for the Union Catalog. The individual campus is responsible for the quality of the input, working under guidelines developed for retrospective conversion.

FIGURE 5

Campus Retrospective Conversion Projects

CAMPUS PROJECT	UCD LAW	UCD HEALTH SCIENCES	UCB LAW (Phase 1) ¹	UCB LAW (Phase 2)
Type of Collection	Law	Health Science	Law	Law
Duration (FY)	1978/79-1981/82	1979/80-1980/81	1978/79-1981/82	1982/83-1987/88
Records Converted				
1973-to-date	13,699	15,200	45,408	48,602
Pre-1973	Processing date <u>18,161</u>	<u>22,800</u>	<u>1,892</u>	<u>8,076</u>
TOTAL	31,860	38,000	47,300	56,678
COST	\$110,033	\$129,062	\$126,114	\$130,891
Per/Rec Cost	\$ 3.45	\$ 2.55	\$ 2.67	\$ 2.31

1. Divided into two phases; Phase 1, 78/79-81/82, which falls within the Retrospective conversion funding, and Phase II, 82/83-87/88, for which funding will have to be sought.

CAMPUS PROJECT	UCR	UCB / ITS	UCSD
Type of Collection	Science & Science Fiction	Transportation	Undergraduate
Duration (FY)	1978/79-1979/80	1979/80-1981/82	1979/80
Records Converted			
1973-to-date	10,212	11,180	8,680
Pre-1973	Processing date <u>19,788</u>	<u>10,320</u>	<u>40,820</u>
TOTAL	30,000	21,500	49,500
COST	\$ 60,061	\$ 59,759	\$108,347
Per/Rec Cost	\$ 2.47	\$ 2.78	\$ 2.19

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7.4 Summary of conversion strategies

^{a other vendor} Each of the three conversion strategies--MARC card conversion, OCLC_i conversion, and campus conversion--is designed to take advantage of a ^{characteristic of campus that will} specific factor to ^{ensure the} reduce the cost of conversion, improve the quality of conversion² and/or timeliness of conversion. In the MARC card conversion project, ^{the} DLA-LC-MARC data base is utilized to reduce the cost of keying information that is already in machine-readable form; ^{other vendor} in the OCLC_i conversion, OCLC_i ^{input &} expertise and the OCLC data base ^{may be} are utilized to reduce the overall cost of conversion; and in campus conversion, campus expertise and campus participation in a technical processing system are used to speed conversion of important collections.

THE NATIONAL LIBRARY OF MEDICINE'S
RETROSPECTIVE CONVERSION OF THE SHELFLIST

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Retrospective Conversion of the Shelflist

Sally K. Sinn, Acting Head
Cataloging Section

Background

The future of card catalogs is a topic of widespread discussion and study in all major libraries in the United States. Although the new cataloging rules to be implemented in 1981 have precipitated the current discussions, libraries have been concerned for some time as they experience physical deterioration of files and ever-increasing costs for file maintenance.

Because NLM has had an automated catalog for almost 15 years, which now represents almost 40% of the general collection, the issue of closing the card catalog and discontinuing the manual system has been considered for a number of years. Although all cataloging completed since 1965 has been in machine-readable form, NLM has continued to maintain the manual card catalog so that users would still have a single access tool. This activity involves generating by computer and manually filing approximately 200,000 cards per year. Furthermore, this maintenance requires a high level of competence to interpret and apply the existing filing rules.

Aside from concern over the increasing costs of maintaining the manual file, the immediacy of the card catalog closing issue became more apparent in 1977 and 1978 as NLM considered the impact of adopting AACR2 in 1981. Because of its role as a source for original cataloging data in support of the biomedical community, NLM had to develop plans to solve the complex considerations involved in closing its card catalog without causing major disturbances to its ability to meet normal service obligations. Early in 1978 the NLM Director authorized the development of plans to close the card catalog and to devise alternative methods to access the catalog files.

In studying the alternatives for closing NLM's card catalog, staff found that the issues could not be examined within the narrow context of the card catalog. The selection of an effective process and alternative for closing the card catalog was viewed in the context of long term goals for NLM in order to provide an improved integrated approach to technical processing, more efficient processes for carrying out important functions such as inventory control, and for offering additional services to NLM's Reference Services Division in the form of an improved base for circulation and Interlibrary Loan.

Decision Process

An overriding question in examining closing alternatives included the concept of whether resource allocations and expenditures for any specific alternative offered only a means for an orderly closing of the past or whether a foundation for future activity within the long term plan could be established at the same time. Guidelines were established for evaluating alternatives for closing the card catalog; these were based on NLM's policy of providing authoritative bibliographic records consistent with national standards, as well as meeting internal goals for future improvements. These guidelines can be summarized as follows:

1. If the manual card catalog is maintained for some items, the year of publication of a cataloged item should determine its inclusion in the card catalog.
2. All current machine-readable records should reflect the most recent set of AACR rules; if retrospective records are added to the file, pre-AACR name forms should be linked to current forms through the name authority system.
3. Uniform bibliographic data should be maintained for any specific item even if it is contained in manual as well as machine files.
4. NLM's current service level to its users should be maintained or improved.

The least expensive method of card catalog closing is closing by cataloging year rather than by year of publication. This alternative violates the first guideline, established by NLM's History of Medicine and Reference Services Divisions, who feel that closing by cataloging year provides no orderly base for clear service guidelines to the user population of the closed catalog. The potential for double look-up and insecurity about negative searches would decrease the service level to patrons.

Closing by imprint year presents some fairly complicated problems. Based upon analysis of cataloging data for the past ten years, the card catalog cannot really be frozen after an imprint year is chosen. Even with an imprint cutoff date of 1965, the level of cataloging for older imprints does not drop below 5-10% of the total because of the need to collect and catalog historical material.

Another problem in considering card catalog alternatives is the overlap of NLM's manual and machine-readable records. NLM has had machine-readable cataloging records since 1965 but has continued to add to and maintain the manual catalog so that users would still have a single access tool; some 200,000 records are redundantly reflected in both the online file (CATLINE) and the card catalog. This overlap presents problems in handling AACR2 and normal recataloging changes. Closing the card catalog forces a choice of: a) maintaining overlapping records in both the manual and machine files, b) maintaining only the machine-readable records and permitting the possibility of differences in the machine and card record for any particular item, or c) not maintaining any records which have cards associated with them. Each of these alternatives violates at least one of the closing guidelines; the first is also extremely costly since cards must be generated and filed whenever AACR2 changes are made.

The only closing alternative that would follow all established guidelines and, at the same time, lay the groundwork for future automation activities, was a conversion of the retrospective records in NLM's shelflist. The conversion of the retrospective shelflist records (and related analytics) and the inclusion of these records in CATLINE would integrate into one file NLM's entire modern collection (of imprints of 1801 to present). The card catalog could be closed, with new records and maintenance to old records reflected only in the machine file. Before embarking on such a conversion project, however, a careful study of the shelflist was necessary, to identify and size up various handling problems and to analyze the content of this file representing much of NLM's cataloging history.

A sampling of NLM's shelflist was performed to determine the feasibility of the best methods for converting the shelflist to machine-readable form. This analysis was completed in April of 1978, when there were over 400,000 cards in the file, representing both machine-readable and non-machine-readable records. By 1980 the catalog was estimated to contain approximately 500,000 items, of which 200,000 would already be automated in CATLINE, NLM's online catalog file. The results of the shelflist sample provided the following estimated percentages of each major record type in the file:

<u>Card Types</u>	<u>Description</u>	<u>Approx. % of Total</u>
Post-1965 Cards	Records already in machine form	34.4
Pre-1965 Cards, both NLM and LC copy	Records not in machine form	53.2
1965 Cards	Cannot tell from looking at card if there is machine equivalent or not	4.1
Flimsies	Temporary records filed into the shelflist at the time of cataloging and will be replaced by permanent cards	3.6
OXNLM Cards	Cards representing additional call numbers assigned to serial analytics, as a service to libraries not wishing to use the NLM form number	2.1
Guide Cards, Instruction Cards	Cards with location aids, cutting directions, etc.	.9
Miscellaneous	Pamphlet records, card-outs, etc.	1.9

The shelflist analysis further revealed that the file was in good condition and readily convertible into machine-readable form. Because pre-machine records, representing the cataloging effort from 1946 to 1965, spanned a period of only twenty years, there was amazing consistency of cataloging policy and practice and style of notation. The data were clean and relatively easy to interpret.

In addition to the types of records noted in the shelflist, there were also two major classes of cataloging records identified as critical for conversion which are not fully represented in the shelflist. These are analyzed serial issues and individual contents of bound volumes of pamphlets. Various methods were examined for identifying records of those types which were not already in machine-readable form in order to include them in the retrospective conversion. The only reliable method for capturing data on all serial analytics was to read the entire name/title card catalog for these distinctive entries and photocopy the records found for inclusion in the keyboarding process. Location of full cataloging records for the individual items in bound pamphlet-volumes also involved searching the name/title catalog, but main entry headings for these records were known from the shelflist entries for pamphlets.

With the knowledge gained through this analysis of the shelflist, conversion costs could be estimated and compared to the cost of maintaining the card catalog over a five-year period with the required AACR2 changes. It was estimated that the cost of converting the 300,000 non-machine-readable records for the pre-1965 period into a computerized format would be comparable to those five-year maintenance costs. A shelflist automation project would surely be a major effort in terms of planning and expenditure of resources, but it could also be expected to produce a tool of considerable benefit to NLM and its public. These expenditures could be viewed as a foundation for future automation and control projects, to improve NLM's internal processing and for increased services to online network users. This project was reviewed and endorsed by an outside panel of experts composed of representatives from the medical library field, Library of Congress, and the academic library community.

Conversion Method

NLM's choice of a data entry method for conversion was influenced by several other internal factors and decisions.

1. Decision to convert full cataloging records.

While some libraries have done shelflist conversions using partial truncated records, these conversions were usually to support circulation systems. NLM recommended converting full records from the beginning in order to support future automation projects, including online shelflisting, inventory control and an online user catalog. It was demonstrated that conversion of partial records would seriously undermine the capability to retrieve collections of related works. In addition, the presence of certain notes and added entries is essential to the proper shelflisting of the items.

2. Conversion of NLM's current input system for cataloging records.

NLM's MEDLARS II catalog input module was not designed to provide flexibility at input because of its rigorous syntactical requirements and validation routines. It was felt that a specialized data entry system should be developed which could provide a simplified online input mode for a wide range of data elements. A mixed mode of formatted tags and prompting sequences was preferred to assist data entry operators in transcribing the bibliographic elements in order from a catalog card onto the CRT screen display.

The data entry system that was developed provides both for interactive communication with the computer, through prompting and immediately displayed validation error messages, and also for simplified editing of data in a block transmission mode. The user is able to switch back and forth between those two modes by pressing a function key on the keyboard.

3. Desirability of having a dedicated data entry system for this project.

The Retrospective Data Entry System (RDES) was implemented on a Data General S-200 minicomputer with direct online data entry via CRT terminals. This permits the contract activity for conversion to proceed independently of other processing demands on the mainframe computer. Once the data are in machine-readable form, they will be transmitted from the minicomputer-based RDES to the online catalog file, CATLINE, from which the MARC-formatted output can be derived.

The actual keyboarding of records began in October, 1979 as an onsite three-year contract. Contract personnel consisting of 5-6 keyboarders, 3-4 reviewers, and a Project Manager are working full-time to input the retrospective records directly from the shelflist cards and to review 100% of the keyboarded records before they are released to the NLM Project Officer for quality-control sampling. In the process of reviewing every keyboarded record, the contractors are also referring to NLM, by means of a referral flag in the record, any records containing problems which they could not resolve themselves. Even in the first four months of the contract these "referrals" have represented less than 5% of the total number of records keyboarded.

The contractors will be keyboarding, reviewing, and releasing approximately 7,000-9,000 records per month over the three-year contract period. Our experience during these first months indicates that the number of records which can be keyboarded and reviewed per person is very close to NLM's estimate (10-12 records per hour; 18-20 records reviewed per hour).

Interim Catalog Access

While Retrospective Conversion of the Shelflist proceeds, NLM staff are developing plans for an interim catalog access method which will permit the bulk of manual card catalog maintenance to cease in January 1981. At that time, a Computer Output Microfilm (COM) product from the present automated catalog file of all items cataloged since 1965 will become the first consulted source of bibliographic and NLM location information for general public use. Online access to the data base will provide a backup to COM for the general public and serve as the primary mode of access for NLM staff.

During the interim period, NLM will probably cease filing catalog cards for newly cataloged modern items and for revised records which are already in machine-readable form. Cards will be removed from the manual card catalog if a call number change is made in the corresponding machine-readable record. Maintenance to the manual shelflist and card catalog for items not yet converted to machine-readable form will continue until retrospective conversion has been completed.

JOINT UNIVERSITY LIBRARIES

RETROSPECTIVE CONVERSION PROJECT

PROCEDURES

- A. General Instructions
- B. Spot Checklist
- C. Procedure I
- D. Procedure II
- E. Copy Search Procedure
- F. Procedure III
- G. Examples of Flags and Jackets

A. GENERAL INSTRUCTIONS

1. Assigned tray of Shelf List will be labeled on front:
 "Shelf list conversion, DO NOT drop cards below rod. _____"
NAME
2. Take tray to terminal, leaving note at Shelf List that tray has been taken to the terminal area.
 - (1) Shelf List must be kept in perfect order at all times.
 - (2) All cards above rod may be dropped only by supervisors.
3. Log in using Retrospective Conversion authorization.
4. See Manual and TAG CHECKLIST sheet. (Note: in Fixed Fields language must agree with text. If incorrect, flag GOLD and pass in Procedure I.)
5. Supplies needed:
 - Pencil
 - Black pen--Bic
 - Manual (in terminal area)
 - Statistic Sheet (in terminal area) SEARCHED
 UPDATED
 - Flags and Jackets (see Procedure sheets for instructions)

GOLD FLAG: To be placed in front of questionable cards in Procedure I. In Procedure II assistant will search, remove GOLD flag, and make decision for further action.

BLUE FLAG: To be placed in front of cards with series in Procedure I.

RED STRIPED FLAG: To be placed in front of a card with a Save number (example: /13) above call number. Revisor will call from Save, update and send.

AVOCADO FLAG: Request LC copy search.

GREEN JACKET: Problem requiring supervisor's attention.

RED JACKET: To be placed in Shelf List by Supervisor ONLY. RECON unable to put holdings on OCLC.

BLUE JACKET: Placed on Divinity Library cards in Procedures I and II.
6. Procedure I will be followed by assigned personnel. Procedure II will be followed by experienced personnel cleared by Supervisor.
7. A list of JUL holding libraries is attached to wall in terminal area. All cards will be TJCC unless Shelf List card carries a location typed above or below call number. It is possible to have more than one holding library ("Central, Also in Mngt." is an example). The 049 field MUST be changed to agree with card.
8. If any questions arise, please ask supervisor before updating.

B. SPOT CHECKLIST FOR MATCHING RECORDS AND UPDATING

SEE OCLC MANUAL FOR COMPLETE TAGGING, ETC. THE LIST BELOW IS NOT COMPLETE.

Use searches in manual to locate proper record.

If found, compare, match or adjust before updating.

OCLC terminal-produced cards will need only the OCLC # recorded on card (DO NOT UPDATE).

Fixed Fields: make sure language code agrees with text. Other codes do not need to be checked.

- 010 LC card number
- 040 Cataloging source - #c is the library that input the record.
- 050 0 LC call number. Numbers must match and be tagged correctly.
- 090 Local LC call number
- 049 Holdings of JUL: TJCC is automatically on our screen. If the book is held at any other location, see chart on wall in terminal area. Be sure to list all locations in this field before updating.
- 1__ Main entry. Match for proper tagging (see manual).
- 245 Title: The delimiter 1 indicates the title is traced in the added entries. Check all delimiters according to manual.
- 250 Edition statement.
- 260 Imprint: check place, publisher and date to match our card.
- 300 Collation
- 4__ Series: Flag BLUE on Procedure I. Follow Procedure II in updating.
- 500 General notes
- 505 Contents note: check indicator. (Note the indicator 1 will not print on our terminal cards if ordered)
- 6 Subject headings: check spelling, delimiters, proper coding, etc.
- 7 Other added entries: Recheck title as traced in 245 field. Use manual for proper fields, etc.
- 8 Series tracing: Follow Procedure II in updating.

When all is checked and OK to match our LC standards, UPDATE/SEND.

The OCLC # is to be recorded in the upper right corner of the Shelf card.

ASK IF YOU ARE UNSURE!

C. PROCEDURE I

Note: This procedure, performed by relatively inexperienced workers, calls for use of only GOLD and BLUE flags and BLUE jackets.

1. SERIAL SHELF CARD: Pass by without flag.
2. DOCUMENTS CARD: Pass by without flag.
3. TEMPORARY CARD or SLIP: Pass by without flag.
4. DIVINITY CARD: Jacket BLUE and pass unless it is an OCLC card.
5. SHELF CARD WITH SERIES: Flag BLUE and pass.
6. OCLC PRODUCED CARD: Search by LC card number, check for our holding symbol (TJC) in the list of holding libraries at the end of the record.* Record the OCLC number on the card, but DO NOT UPDATE. If no LC card number, or if a problem, flag GOLD and pass.
7. LC PRINTED CARD WITH TYPED CHANGES OR ADDED NOTES: Flag GOLD and pass.
8. TYPED CARD WITHOUT LC CARD NUMBER: Flag GOLD and pass.
9. TYPED CARD WITH LC CARD NUMBER: Search by LC card number. If 050 0 LC call number matches our card's typed call number, continue with all checks. If 050 0 or 090 on base disagree, flag GOLD. If everything matches exactly, update. If you have ANY question, flag GOLD.
10. LC PRINTED CARD: (1) Search by LC card number. If not found, (2) search by auth/titl. Compare all fields with card for match. (1) If changes need to be made, flag GOLD and pass. (2) If all matches perfectly, record OCLC #, update and send.

* This procedure was set up prior to OCLC's revised display of holdings.

D. PROCEDURE II

NOTE: This procedure calls for a moderately experienced worker.

1. DIVINITY CARDS: If the card is LC and the call number in the upper left corner of the card matches the LC call number at the bottom of the card, check all fields, treating like a regular LC printed card. Make changes, update, and send if possible. Remember, always change the 049 field from "TJCC" to "TJCD". If the call number differs, jacket BLUE.

2. SHELF CARD WITH SERIES: (BLUE flag from Procedure I) Series can be confusing at times. Don't hesitate to ask questions! Search by LC card number, auth/titl, etc. Compare fields.

- a. If series on LC card agrees with the 4-- field, record the OCLC # and update and send.
- b. If series on LC card and base differ, use the LC card as a guide but each card may be questioned, if necessary, until you are clear on the pattern. Changes may be put in Save with the Save number penciled above the call number, with a RED STRIPED FLAG placed in front of it, to be checked by experienced personnel later.

GREEN JACKET if there is any problem.

3. OCLC PRODUCED CARD: (GOLD flag from Procedure I) Search by auth/titl, etc., until the proper record is obtained (i.e., the one on which our initials, TJC, appear). Record the OCLC number, but do not update.

If the card states "Also in ..." and then the name of an individual library in the JUL system such as Management, an indication needs to be made in the 049 field that this book is in that library as well as in our Central Library. Since the terminal display does not show what is actually on our archive tape, we will redo the 049 field for all titles held in more than one JUL library. Therefore, not only will TJCC appear in the 049 field, but also TJCM (M standing for Management) as well. The 049 field would, in this case, appear like this:

049 TJCC #a TJCM

Refer to the tag sheet for the correct form, and to the list of JUL libraries for the correct symbols. Update and send such records only when this kind of change has been made.

4. LC PRINTED CARD WITH TYPED CHANGES OR ADDED NOTES (GOLD flag from Procedure I) These cards are usually problems. Automatically request LC copy with GREEN jacket and AVOCADO flag.
5. TYPED CARD WITHOUT LC CARD NUMBER: (GOLD flag from Procedure I) If search produces a good record (all fields complete and everything matching exactly) record with pen the LC card number as it appears in the 010 field in the lower right corner. Record the OCLC # and update and send.

If search produces a questionable record, request LC copy search with AVOCADO flag and GREEN jacket.

6. TYPED CARD WITH LC CARD NUMBER: (GOLD flag from Procedure I) If 050 0 LC call number matches our card's typed call number, continue all checks. If everything matches EXACTLY, record the OCLC # and update and send.
7. LC PRINTED CARD: (GOLD flag from Procedure I) If minor changes are needed, make them, update and send. Major changes must be revised: put in Save and flag with a RED STRIPED flag. If record does not appear on the base, jacket GREEN.

E. LC COPY SEARCH PROCEDURE

1. General Instructions

- A. Copy Search: Use Mansell and NUC volumes outside Workroom or in Book Acquisitions.
- B. When LC copy is requested, shelf card will be jacketed GREEN and an AVOCADO flag will be placed in front of card (leaving call number visible.)

- 2. LC copy will be searched, photographed and inserted in the GREEN jacket. AVOCADO flag will be reversed (covering call number) indicating search completed. If LC copy is not available, place a note in the GREEN jacket (no LC copy...or other problem) and reverse AVOCADO flag.

3. Instructions or Helpful Hints:

Auditron MUST BE KEPT on your person. DO NOT lay it on shelf!

The public user gets first place in using Xerox machine.

Four books (titles) are enough to pile up at one time.

If there is an LC card number on card, undoubtedly there is LC copy.

KEEP LOOKING!

Check first two digits of LC card number; it sometimes indicates what year or NUC to look in...but not always.

If no Library of Congress copy, get best NUC available unless you determine NO COPY.

In German, an "e" over a letter means an "e" has been omitted.

Spanish copy has been catalogued in the 70's, keep looking.

Try NUC volumes published after the copyright date if you do not locate it in year of copyright.

If non-LC copy is found, it is also possible recent volumes might have LC replacing the old copy.

Multiple surname (Jones-Smith, Michael), look under both names.

Corporate name (Brazil. Dept. of Interior. Parks, recreational areas, etc.) may be under a section of the name. Keep looking.

REMEMBER: Your good copy helps to create a high standard record.

F. PROCEDURE III

Note: This procedure calls for a very experienced worker.

1. Procedure I and II may be combined by an experienced worker in updating a Shelf List tray.
2. REVERSED AVOCADO FLAGS WITH XEROX COPY IN GREEN JACKETS: To be revised for possible updating. A quick review may be made off-terminal. The review may determine that copy is correct, not available, or other problems such as recataloging, reclassing, which need supervisor's attention. The tray will then be taken to the terminal for proper search methods for updating or decision for INPUT. Some decisions are needed whether to INPUT or to add our holdings to an existing (but questionable) record.
3. GREEN JACKETS WITH INPUT NOTE: All searches will be made before a new record is created. After inputting a record, print out on the printer and put the record into the Save file, noting the Save #. The card with all information attached to the print-out will be revised for corrections by a supervisor or experienced personnel. The record must be searched again to determine that it has not been added to the data base while we have been working. When the record is withdrawn from the Save file, any changes may be made before UPDATE message is sent. Record the new OCLC # and count as an input on the statistics sheet.
4. Other activities will be assigned by the supervisor.

"Management Decisions" and "Retrospective
Conversion Study"

MANAGEMENT DECISIONS:

1. Does the record in the machine readable database need to match the library's record exactly? If not, to what extent?--call number, series statement, local notes, copy numbers, etc.
2. Are there libraries using the OCLC database whose cataloging will be considered acceptable as a general rule, or will only LC cataloging be acceptable?
3. What level of staff will be needed to do specific parts of the conversion?
4. Should the conversion be done by the cataloging department, or should a special unit be set up--e.g. a straight production line?
5. How the data in machine readable form will be used will define the level at which it is to be input.
6. Is the time needed to amend OCLC records to agree with local records worth the additional time required to input such amended records, or should a library accept any bibliographic match and assume that someone else's cataloging may be as valid as their own?
7. As records are input retrospectively, do they need to be updated and upgraded--to AACR II for example?
8. Is a library willing to set up new personnel schedules to take advantage of slow and fast terminal response times--e.g. 8-5 hours are the slowest response times.

Petrospective Conversion Study

- Step 1. Sample shelflist. This involves systematically sampling the shelflist to produce a statistically valid representation of the records contained there. At UCB, it was decided that a sample size of 2,000 records would produce valid results in our shelflist of approximately 500,000 records.
- Step 2. Compare the sample records against the OCLC data base and assign each sample record to one of 9 predetermined categories, reflecting the availability of matching copy. The 9 categories, it is felt, will exhaust all possible alternatives. These categories are:
1. LC cataloging input by LC (exact match with UCB)
 2. LC cataloging input by member library (exact match with UCB)
 3. Member cataloging input by member library (exact match with UCB)
 4. LC cataloging input by LC. Bibliographic match, but some elements different than UCB shelflist.
 5. Member cataloging input by member. Bibliographic match but some elements different than UCB.
 6. Bibliographic match, but record varies significantly from UCB shelflist.
 7. Variant edition of items in UCB shelflist.
 8. Serial record in UCB shelflist (no further action)
 9. No match exists in OCLC database

The above categories have been defined more specifically--addressing what elements are necessary to define the types of matches outlined above.

- Step 3. By actual work at the terminal and by actual cataloging procedures in place at UCB, we will assign an amount of time needed to "convert" a UCB shelf list record in each of the above categories to an acceptable conversion record in the OCLC database. At minimum, this procedure involves adding holdings and locations fields as well as changing the call number when necessary.
- Step 4. Project, from the sample, the total number of records in the shelflist in each category above.
- Step 5. Multiply the projected number of records by the time needed to convert records to come up with a total conversion time.

OTHER FACTORS:

1. We will define minimum, middle, and high levels of input and assign times to them. For example, although there may be a bibliographic match, minimum level input would define that series statements not be changed to UCB forms, while high level would require changing to UCB series authority and updating form of entry to AACR II. There are several of these decisions that need to be addressed. These fall beyond the decision of "Is there a bibliographic match?" Times will be assigned for these procedures as well.

2. There are fixed fields on the OCLC workforms which need to be filled in to make maximum use of the data in a machine readable catalog. Times for completing this information will also be a consideration, and an area of study.

PROCEDURES FOR RETROSPECTIVE CONVERSION SAMPLE

I. Searching the data base

By referring to the shelflist, perform the following searches to retrieve a record.

- (1) Library of CongressCard number (LCCN)
- (2) International Standard Book Number (ISBN)
- (3) Title
- (4) Name/Title
- (5) Personal Name
- (6) Corporate Name

II. Determining a match

To determine a bibliographic match, compare the record and shelflist, checking the following fields and subfields:

FIELD	NOTE
010 LCCN	If present
1XX Main Entry Name	All subfields
245 Title	Up to * b
250 Edition statement	If present
260 Imprint	All subfields, but place may vary within the same country
300 Collation	Arabic pagination only
FIXED FIELDS	Complete, without fill characters, "m" in Bib Lvl

Write the OCLC control number of the record which comes closest to matching the shelflist on the top of the shelflist card in pencil and clip according to the appropriate color code.

If in attempting a search a deadend search results due to more than 256 entries, set the card aside and retrieve the book to obtain more bibliographical information to continue the search.

III. Color coding records

RED

Red indicates an exact match which is LC cataloging input by LC.

FIELD	NOTE
010	Exact if present
020	Exact if present
040	DLC + c DLC
1XX	All subfields match
245	Exact up to #b
250	Exact if present
260	All subfields, place may vary within the same country
300	Arabic pagination only must match
FIXED FIELDS	Complete, presence of one fill character is acceptable

BLUE

Blue indicates an exact match which is LC cataloging input by member.

FIELD	NOTE
010	Exact if present
020	Exact if present
040	DLC + c XXX (where XXX is member code)
1XX	All subfields match
245	Exact up to #b
250	Exact if present
260	All subfields, place may vary within the same country
300	Arabic pagination only must match
FIXED FIELDS	Complete, presence of one fill character is acceptable

YELLOW

Yellow indicates an exact match cataloged and input by a member library.

FIELD	NOTE
010	Exact if present
020	Exact if present
040	XXX * c XXX (where XXX is member code)
1XX	All subfields match
245	Exact up to * b
250	Exact if present
260	All subfields, place may vary within the same country
300	Arabic pagination only must match
FIXED FIELDS	Complete, presence of one fill character is acceptable

GREEN

Green indicates LC cataloging which varies slightly from CU shelflist.

FIELD	NOTE
010	Exact if present
040	DLC * c DLC <u>or</u> DLC * c XXX
1XX	May vary in form of name or be absent
245	May vary slightly
250	Exact if present
260	All subfields, place may vary within same country
300	Arabic pagination only must match
FIXED FIELDS	Complete, presence of one fill character is acceptable

ORANGE

Orange indicates member cataloging which varies slightly from CU shelflist.

FIELD	NOTE
010	Exact if present
040	XXX + c XXX
1XX	May vary in form of name or be absent
245	May vary slightly
250	Exact if present
260	All subfields, place may vary within the same country
300	Arabic pagination only must match
FIXED FIELDS	Complete, presence of one fill character is acceptable

WHITE

White indicates a bibliographic match but the shelflist and record vary significantly.

FIELD	NOTE
010	Exact if present
040	DLC or XXX, any combination
1XX	May vary significantly in form or be absent
245	May vary in wording or be shortened
260	May be incomplete
300	If present, arabic pagination should match within 10 pages
FIXED FIELDS	"K" in Enc Lvl, or more than two fill characters

PINK

Pink indicates variant copy such as variant edition or variant imprint.

FIELD

NOTE

010

May be different

020

May be different

040

DLC or XXX, any combination

1XX

May vary in form or be absent

245

May vary in wording or be shortened

250

May be different

260

May be different

300

May vary

FIXED FIELDS

May be complete or incomplete

PURPLE

Purple indicates a serial record, either the shelflist card appears to be a serial by containing a note such as "For holdings consult SBC" "Serials File"...etc., or the data base record contains an s in the Bib lvl of the Fixed Field.

BLACK

Black indicates no match. An adequate monographic record cannot be found in the data base.

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COLOR CODES FOR RETROSPECTIVE CONVERSION SAMPLE

EXACT MATCHES:

An exact bibliographic match of a shelflist card and data base record is found when the author, title, edition statement, imprint, collation, and LC card number are the same and the fixed fields of the data base record are complete.

RED if Exact Match and is LC cataloging input by Library of Congress.

BLUE if Exact Match and is LC cataloging input by a member library.

YELLOW if Exact Match and is member cataloging input by a member library.

VARIANT MATCHES:

A match is found but there are variations in the author, title, edition, imprint, collation, or LC card number. The variations will be coded as:

GREEN if LC cataloging input by LC with same edition, imprint, collation but author or title vary slightly from our shelflist. An example of this would be something CU cataloged originally and later was done by LC. The choice of entry might vary even though it is a bibliographic match.

ORANGE if member cataloging input by member with the same imprint, edition, and collation but author or title vary slightly from our shelflist. An example would be something cataloged at CU and at a member library so that choices of entry might vary even though it is a bibliographic match. The record would require significant modification.

WHITE if there is a bibliographic match but the record varies significantly. This category will include all K level, which is considered by OCLC to be less-than-full-cataloging. It will include records with shortened authors, titles, or imprints and those with incomplete fixed fields. The records will require significant modification.

PINK if there is a variation in the edition statement, imprint, or LC card number but the author and/or title match or vary slightly. The base information of the record can be used in most cases for conversion purposes even though the record may be a different edition.

NO MATCH:

BLACK if no adequate monographic record can be found.

SERIALS:

PURPLE if shelflist appears to be a serial, i.e. if shelflist contains a note such as "For holdings consult SBC"... "Serials File"...etc. or if the data base record contains an s in the Bib lvl of the fixed field indicating it is a serial record.